# Guide for Administration of Merchant Marine Examinations (Deck & Engineering Guide)

**June 2011** 

This publication provides guidance for NMC Evaluators and personnel who actively administer examinations and monitor applicants in the exam room.



Commanding Officer United States Coast Guard National Maritime Center 100 Forbes Drive Martinsburg, WV 25404 Staff Symbol: NMC-2 Phone: (304) 433-3400 FAX: (304) 433-3409

CG-NMC

To: DISTRIBUTION

Subj: GUIDE FOR THE ADMINISTRATION OF MERCHANT MARINE DECK & ENGINE EXAMINATIONS (DECK & ENGINEERING GUIDE) MCP-MA-NMC2-03(08)

Ref: Code of Federal Regulations Title 46, Chapter 1, Subchapter B

<u>PURPOSE</u>. This manual provides guidance for personnel who monitor merchant marine applicants in the exam room of the Regional Examination Centers (REC). National Maritime Center (NMC) evaluators are to use this publication to determine which modules are to be administered for a given endorsement level and what training is acceptable in lieu of an examination module.

<u>ACTION</u>. Commanding officers of units with marine safety responsibilities should bring this manual to the attention of the maritime industry with interests in marine personnel issues and to institutions that offer U.S. Coast Guard approved training. This manual will be distributed by electronic means only. It is available at: MCP-FM-NMC1-13 MMS User Index.xls <u>Guide for Administration of Merchant Mariner Exams</u>: <u>Deck and Engineering</u>

<u>**DISCUSSION.**</u> The Examination Structure Sheets (ESS) contained in this manual reference the written examinations for each endorsement and document.

The Coast Guard has developed an electronic distribution system of examination modules to improve examination quality and productivity. This manual reflects these changes and complements the use of the electronic distribution system.

**PROCEDURE**. The ESSs contained in this manual are effective June 2011 and the previous *Deck & Engineering Guide*, dated June 2010, is cancelled.

The ESS contains detailed information for each endorsement exam. Consult the ESS for unique directions, presentation order of examination modules and guidance on courses accepted in lieu of an examination module.

<u>PROCUREMENT INFORMATION.</u> Distribution will be provided by electronic means for Coast Guard personnel at: MCP-FM-NMC1-13 MMS User Index.xls <u>Guide for Administration of Merchant Mariner Exams</u>: Deck and Engineering

<u>COMMENTS.</u> Comments can be made to Commanding Officer, National Maritime Center (NMC-2), 100 Forbes Drive, Martinsburg, WV 25404 or by calling (304) 433-3400.

Dist: Commandant (CG-522) Areas (Ap, Pp) All District Commanders (P) All Sector Commanders All RECs

Record Of Changes					
Version         Reason for Change/Approved By         Approval Date					
1.0	Updating Documents	02/2011			
2.0	Updating Documents				
3.0					
4.0	Document Updates	04/08/2011			
5.0	Document Updates	05/23/2011			
6.0	Document Updates	08/01/2011			
7.0	Document Updates	10/20/2011			
8.0	Document Updates	08/06/2013			
9.0	Document Updates	08/26/2014			

# **Table of Contents**

NO	TE: S	ections highlighted in light blue are linked to Examination Structure Shee	t indexes.
1.	IN	TRODUCTION	1
2.	GI	ENERAL INFORMATION	2
2.1		tructions	
2.1	2.1.1	Examination Structure Sheets (ESS):	
	2.1.2	Exam Room Materials:	
	2.1.3	Exam Room Procedure:	
	2.1.4	Maritime Academy Testing:	
	2.1.5	Traveling Examination Teams:	
	2.1.6	Duties of the Examiner:	
	2.1.7	Exam Administration:	
	2.1.8	Answer Sheets:	
	2.1.9	Comments and Challenges:	
	2.1.10	Reconsideration and Appeal Procedure:	
	2.1.11	Retest Policy:	
	2.1.12	Coordination:	7
	2.1.13	Multiple Ratings:	7
	2.1.14	Oral Assisted Examinations:	7
	2.1.15	Renewal Exams:	7
	2.1.16	Custody and Security:	8
2.2	Ru	les of the Examination Room	9
2.3	Co	mment – Challenge Sheet	11
2.4	Du	ties of an Examiner	12
2.5	Ex	aminer Checklist	13
2.6	Ora	ally Assisted Examinations	14
2.7		veling Examination Teams	
2.8	Ma	terials Allowed in the Examination Room: Deck Exams	19
3.	EN	GINEERING GUIDE	23
3.1		neral Instructions for the Administration of Engineering Exams	
3.2	Un	limited Engineer Officer Endorsements	25
	3.2.1	Administration of Upper Level Officer Endorsement – Engineering Exams	
	3.2.2	Examination Structure Sheets Index	
	3.2.3	Quick Reference – Upper Level – Engineering Endorsement	28
	3.2.4	Examination Structure Sheets: Unlimited Engineer Officer Endorsements	30
3.3	Lir	nited Engineering Officer Endorsements	38
	3.3.1	Administration of Limited Engineering Officer Exams	38
	3.3.2	Examination Structure Sheet Index	
	3.3.3	Quick Reference – Limited Engineering Officer Endorsements	40
	3.3.4	Examination Structure Sheets: Limited Engineer Officer Endorsements	41
3.4	Mo	bile Offshore Drilling Unit (MODU) Engineering Officer Endorsements	48
	3.4.1	Administration of MODU Examinations	48
	3.4.2	Examination Structure Sheets Index	
	3.4.3	Quick Reference – MODU Engineering Officer Endorsements	
	3.4.4	Examination Structure Sheets – MODU Engineer Officer Endorsements	
3.5		gine Rating Endorsements	
	3.5.1	Administration of Engine Ratings Endorsement Examinations	
	3.5.2	Examination Structure Sheets Index	51

	3.5.3	Quick Reference – Engine Ratings Subject Modules	
	3.5.4	Examination Structure Sheets: Engine Rating Endorsement	. 53
4.	DE	CK GUIDE	.56
4.1	Dec	k Exam Module Codes	. 56
4.2		eans or Near Coastal Routes.	
	4.2.1	Information	
	4.2.2	Examination Structure Sheet Index - Oceans OR Near Coastal License Endorsements	. 59
	4.2.3	Examination Structure Sheets – Oceans or Near Coastal License Endorsement	
4.3		at Lakes and Inland or Inland Routes	
	4.3.1	Information	. 80
	4.3.2		0.4
		ements	
4.4	4.3.3	Examination Structure Sheets – Great Lakes and Inland or Inland License Endorsements	
	4.4.1	Information	
	4.4.2	Examination Structure Sheet Index – River License Endorsements	
	4.4.3	Examination Structure Sheets – River License Endorsements	
		t Class Pilots	
	4.5.1	Examination Structure Sheet Index – First Class Pilot Endorsements	
	4.5.2	Examination Structure Sheet – First Class Pilot Endorsements	
4.6	Uni	nspected Towing Vessels	. 97
	4.6.1	Examination Structure Sheet Index – Uninspected Towing Vessels	
	4.6.2	Examination Structure Sheets – Uninspected Towing Vessels	
4.7		bile Offshore Drilling Units	
	4.7.1	Information	
	4.7.2	Examination Structure Sheet Index – Mobile Offshore Drilling Unit Endorsement	
	4.7.3	Examination Structure Sheets- Mobile Offshore Drilling Unit Endorsement	
4.8	— Dec 4.8.1	k Rating Endorsements	
	4.8.2	Examination Structure Sheet Index – Deck Rating Endorsements	
	4.8.3	Examination Structure Sheet – Deck Rating Endorsements	
		Ç	
5.		CFR QUICK INDEX1	
5.1		CFR PART 10—MERCHANT MARINER CREDENTIAL	
5.2		CFR PART 11—REQUIREMENTS FOR OFFICER ENDORSEMENTS	
5.3		CFR PART 12—REQUIREMENTS FOR RATING ENDORSEMENTS:	
5.4	46 (	CFR PART 13—CERTIFICATION OF TANKERMEN	123
		List of Figures	
Figu	ire 2-1	Sample Response to TET Request	.17
Figu	ire 2-2	Letter of Undertaking	.18
Figi	ire 2-3	Sample Renewal Open Book Exam Letter	.22

# **List of Tables**

Table 2-1 Allowable Exam Room Materials	19
Table 2-2 Allowable Exam Room Materials Available from NMC1	20
Table 3-1 Summary of Examination Modules for Engineering	24
Table 4-1 Summary of Examination Modules for Deck	56

#### 1. INTRODUCTION

In its guidance on the Evaluation of Competence, the Seafarers Training, Certification, and Watchkeeping Code (STCW) states:

"Recognizing the importance of establishing detailed mandatory standards of competence and other mandatory provisions necessary to ensure that all seafarers shall be properly educated and trained, adequately experienced, skilled and competent to perform their duties in a manner which provides for the safety of life and property at sea and the protection of the marine environment."

For reasons such as these the Coast Guard continues to view its written examinations in addition to the training and practical demonstrations as an essential part of the process in developing the mariner's competency.

This Publication has been designed for the use of NMC evaluators and personnel who are actively engaged in overseeing applicants in the exam room. If you have any questions concerning the deck and engine department examinations or suggestions for improvements to the Exam Structure Sheets or other sections of this manual, please contact:

Mariner Training and Assessment Division (NMC-2) U.S. Coast Guard National Maritime Center 100 Forbes Drive Martinsburg, WV 25404

**Title 46 Code of Federal Regulations Part 10** instructs the Officer in Charge Marine Inspection (OCMI) to conduct a Professional Examination of applicants for original issues, raises in grade, increases in scope, and renewals of endorsements. The examination follows a determination by the OCMI that the applicant's training, appropriate practical demonstrations, and experience is satisfactory and they are eligible in all other respects. The purpose of this Publication is to help identify the appropriate professional examination for the OCMI's use, and provide guidelines for the uniform administration of the examinations.

If you need further information or assistance with respect to these Exam Structure Sheets, please do not hesitate to call the USCG National Maritime Center at:

POC: Mariner Information Call Center

E-mail: IAskNMC@uscg.mil

Phone: 1-888-IAskNMC

#### 2. GENERAL INFORMATION

#### 2.1 Instructions

#### 2.1.1 Examination Structure Sheets (ESS)

The contents of each exam incorporating the use of test module(s) and the instructions for its administration are detailed in individual Exam Structure Sheets (ESS). There is an ESS for each officer endorsement and rating endorsement action for which an examination is required. Each examination is made up of one or more modules (tests). All the required modules for a particular officer endorsement and rating endorsement action are shown. An instance where particular modules are not required, further instructions are provided on the individual ESS. Depending on the officer endorsement and rating endorsement for which the applicant is to be examined, modules unique to a particular exam may be combined with generic modules, which are common to several exams. Each module is graded independently unless otherwise indicated.

#### 2.1.2 Exam Room Materials

Exam illustrations will be provided at the back of each exam module booklet. The list of authorized reference materials allowed in the exam room for Deck exams can be found on pages 19 to 21. 46 CFR Parts 1-199 and 33 CFR Parts 1-199 are the ONLY references allowed in the exam room for Engine exams. Examiners at the REC(s) should review the libraries to ensure that these publications, and ONLY these publications, are available to the applicant. Regional Exam Centers (RECs) are responsible for keeping reference materials current.

Only non-programmable calculators are permitted. Applicants may use calculators, but are not permitted to use preprinted forms during the examinations. All calculators must meet the following standards:

- a) It must not use pre-programmed strips or chips or any other pre-programmed device that may be inserted into the calculator.
- b) It may not be a permanently programmed specialty computer, such as a navigation computer. Computers capable of generating trigonometric functions, logs and anti-logs, squares, cubes, and roots thereof, are acceptable provided they meet the other requirements.
- c) Any manually programmable calculator without simple erasure capability is not permitted.
- d) Any printed calculator tape must be turned in at the end of the exam with any scratch paper.

#### 2.1.3 Exam Room Procedure

When an application for examination is submitted, the applicant should be prepared to be examined on all the material applicable to the officer endorsement or rating endorsement for which the application has been made. Examinations may be administered only when all regulatory prerequisites are completed. To allow Exam Room Supervisors to manage their time and resources, it is recommended that applicants be required to make appointments for all exams. Subject to the Exam Room Supervisor's discretion, applicants may start the exam on any day the office is open. A limit of 3½ hours will be provided to each applicant to complete a test module except as necessary to accommodate the working hours of the examination room. The examination fee set out in 46 CFR Table 10.219(a) in Sec. 10.219 must be paid before the applicant may take the first examination section.

#### 2.1.4 Maritime Academy Testing

To accommodate the special circumstances involved, the graduating class of State and Federal maritime academies may be examined by the respective Regional Exam Center (REC), at any time after the first semester of the senior year. Sixty days prior to scheduled testing, the Regional Exam Center administering the exams will select the appropriate modules from the MMLD prod. A request will then be made to the NMC-22, Exam Team, for review and approval of the selected exams prior to printing.

#### 2.1.5 Traveling Examination Teams

When planning the administration of an exam at an offsite location, the Regional Exam Center (REC) and the Traveling Exam Team (TET) may require support from NMC-2. Please ensure that a minimum advance notice of 30 days is provided in writing by e-mail or fax. The POC for Deck Exams is to be the Deck Team Leader; the POC for Engine Exams is to be the Engine Team Leader, with a copy to the Division Chief, NMC-2. Please see additional information at the end of this section (pages 19-23).

#### 2.1.6 Duties of the Examiner

- a. Reviews reference material to ensure that sufficient copies are available, that they are in satisfactory condition, that extraneous markings are removed, and that the material is stowed in an orderly fashion. When necessary, orders new reference material for addition to the library and purges outdated material.
- b. Ensures that consumables are adequate and orders extra consumables when necessary.
- c. Checks examination room after closing for evidence of cheating and takes appropriate action to identify the cheater if evidence is found.
- d. Ensures that furniture in the exam room is adequate for intended use and in good, safe condition. If not, takes appropriate action to remedy.
- e. Maintains a daily log of the persons tested.
- f. Ensures that modules and completed answer sheets are filed with adequate security.
- g. Prior to test administration, visually confirm the correct format of the test module, including but not limited to margins, printing errors.
- h. Prior to test administration, visually confirm the presence of all required illustrations
- i. Prior to test administration, check the validity of each requested and downloaded module.

#### 2.1.7 Exam Administration

When administering an original examination, re-examination, or renewal for any officer endorsement or rating endorsement:

a) An applicant must complete all exam modules by testing on consecutive days. The Chief of the REC is permitted to extend the examination testing to up to 24-hours for a mariner who is faced with an emergency which causes them to interrupt testing in mid-cycle. Additionally, mariners who are faced with a closure of an REC for inclement weather, midweek holiday, building evacuations, etc. will be afforded the opportunity to extend their testing by one day for each day the REC is closed.

- b) An applicant may attempt as many modules as can be completed within the normal working hours of the examination room, provided a minimum of TWO modules are completed per day, with 3½ hours allowed for each module.
- c) Administration of modules is to be in the order chosen by the applicant at the time the appointment to test was made. If no order is chosen, then the administration of the exams will be made in the order listed in the ESS.
- d) Where the ESS indicates two Engineering Modules labeled as Part I and Part II, they are to be graded individually and not to be considered as one module.
- e) All of the modules comprising an exam must be completed before beginning retakes of any failed modules.
- f) Applicants for any officer or rating endorsement should not be stopped from testing even if they fail one or two modules. This ensures that the applicant will not be penalized if there is any change to the crediting of the score of an examination module through the challenge process or if a correction to an exam content is determined to be necessary.
- g) If an applicant for an unlimited officer endorsement fails three (3) modules at any time during the examination, the candidate is NOT to be permitted to continue testing on any ensuing module for that testing series.
- h) A full examination is required in all cases in which an applicant has applied for:
  - i) A change in tonnage groups: Tonnage Groups are defined as:
    - Any Gross Tons (AGT) = GT 1600 GRT /3000 ITC
    - 500 GRT 1600 GRT = 1200 3000 ITC
    - NMT 200 GRT = NMT 500 ITC
  - ii) A raise in grade: Raise in Grade is defined as an increase in the level of authority and responsibility associated with an endorsement.
  - iii) A change in horsepower limitations (Increase in Scope)
  - iv) Exams required to increase the scope of an Existing officer endorsement are listed on each individual ESS for the specific endorsement action. Courses approved in lieu of modules for the action of increasing scope are not permitted to be used in lieu of exam modules where full exams are required. Increase in Scope is defined as a change in horsepower or tonnage limitations, or geographic route restrictions.
  - v) Approval to Test Letters, (ATT), are valid for one year from the date of issuance. All exam requirements must be met within the period of validity of an applicant's ATT letter. Once the ATT letter expires a new application must be made and required fees paid. Any exam scores from prior exam cycles will NOT be carried over once an ATT letter expires.

#### 2.1.8 Answer Sheets

To gather statistics on the exam questions, NMC-22 is scanning the graded answer sheets into a database.

a) All original answer sheets must be mailed to the National Maritime Center monthly or when deemed appropriate by the Regional Exam Centers (RECs).

- b) It is essential that an original Merchant Marine Examination Question Selection/Answer Sheet (CG-5164) be utilized for examinations. Copied or reprinted answer sheets fail to scan properly.
- c) The candidate must darken the appropriate spaces for their social security number, module number and test number at the top of the form as well as their choice of answer for each question.
- d) It is the responsibility of the REC examiner to accept COMPLETED ANSWER SHEETS ONLY. DO NOT ACCEPT for grading any CG-5164 whose information block at the top of the form is incomplete. Do not make any administrative marks in the answer fields.
- e) Answer Sheets (CG5164) are available from: NMC-11

**NOTE:** Please reference FSN 7530-01-GF2-8420 when making inquiries\*\*

#### 2.1.9 Comments and Challenges

If an applicant believes there is something wrong with a question that prevents it from being answered correctly, they must state in writing all the details regarding the discrepancies on a Comment-Challenge sheet.

The applicant must provide the reasons for the challenge, all calculations for math problems and what is believed to be the correct answer. All comments, even if they will not affect the candidate's grade, are valuable and will be used to improve the quality of the questions used on future tests.

If the applicant fails the examination module by no more than one question, they will be given the opportunity to review each question for which credit was not given. Immediately after the review and prior to leaving the exam room, the candidate may submit a challenge sheet for no more than two questions as indicated above. Once the applicant has reviewed his or her answer sheet and leaves the exam room for ANY REASON before submitting their challenges, the challenges will not be accepted.

It is not always possible for the TET examination proctor to correspond with NMC-22 while an applicant is challenging an exam question. To accommodate the TET examination proctor, a challenge sheet will be submitted for no more than two questions at the end of the examination. If the applicant fails the examination module by no more than one question and the challenged question(s) are marked wrong, the TET examination proctor will forward the challenge to NMC-22. If an applicant fails by two questions or more, the challenge sheets then become comment sheets. If an applicant passes the exam, the challenge sheets then become comments sheets.

Examiners will submit to NMC-22 via fax: 304-433-3408, or e-mail: D05-DG-NMCDTEAM for deck <u>or</u> D05-DG-NMCETEAM for engine, the applicant's Comment-Challenge sheet and answer sheet for the exam in question.

#### 2.1.10 Reconsideration and Appeal Procedure

IAW 46 CFR 1.03-40 Any person directly affected by a decision or action of an officer or employee of the National Maritime Center (NMC) involving any of the marine safety functions listed in §1.01–15(c) of this subpart may, after requesting reconsideration of the decision or action by the NMC, make a formal appeal of that decision or action, via the NMC, to the Director of Prevention Policy, Commandant (CG–54), in accordance with the procedures contained in §1.03–

15 of this subpart. The decision of the Director of Prevention Policy, Commandant (CG–54), on such an appeal will constitute final agency action.

If a mariner is unsatisfied with the result of their exam challenge they have the right to request reconsideration of the decision, and appeal if necessary, as outlined in the above paragraph.

IAW 46 CFR 1.03-15(c) When making a formal appeal of a decision or action, as permitted by this subpart, such appeal mist be submitted in writing and received by the authority to whom the appeal is required to be made within 30 days after the decision or action being appealed, or within 30 days of the last administrative action required by this subpart. Upon written request and for good cause, the 30 day time limit may be extended by the authority to which the appeal is required to be made.

#### 2.1.11 Retest Policy

- a) If an applicant for an upper level officer endorsement as defined in 46 CFR 10.107 fails three or more sections, a complete re-examination must be administered. On the subsequent exam, if the applicant again fails three or more sections, at least 3 months must lapse before another complete examination is attempted, and a new examination fee is required. If an applicant fails one or two sections of an examination, the applicant may be retested twice as is necessary on each failed section during the next 3 months. If the applicant does not successfully complete each failed section within the three (3) month period, a complete examination must be administered after a lapse of at least three (3) months from the date of the last retest, and a new examination fee is required. The 3 month retest period may be extended by the OCMI if the applicant presents discharges documenting sea time which prevented the taking of a retest during the 3 month period. The retest period may not be extended beyond 7 months from the initial examination (46 CFR 11.217(a)(1)).
- b) The scheduling of examinations for lower level officer endorsement as defined in 46 CFR 10.107 will be at the discretion of the OCMI. In the event of a failure, the applicant may be retested twice whenever the examination can be rescheduled with the OCMI. The applicant must be examined in all of the unsatisfactory sections of the preceding examination. If the applicant does not successfully complete all parts of the examination during a 3-month period from the initial test date, a complete reexamination must be taken after a lapse of at least 2 months from the date of the last retest, and a new examination fee is required (46 CFR 11.217(a)(2)).
- c) Upon application for a rating endorsement, any required examination will be given as soon as practicable. An applicant for a rating endorsement who has been duly examined and refused a certificate by the Coast Guard may come before the Coast Guard for reexamination at any time after the date of the initial examination. The Coast Guard sets the time of reexamination based on the applicant's performance on the initial examination. However, the maximum waiting period after the initial failure will be 30 days, and the maximum waiting period after a second or subsequent failure will be 90 days. An applicant who has been examined and refused a certificate by the Coast Guard may not again make application for examination until 30 days after the applicant's last failure of an examination or reexamination (46 CFR 12.02-17).
- d) Applicants failing several portions of an examination or those failing one module with an extremely low score should be encouraged to study before attempting a reexamination.
- e) Retest exam modules are required to be separate and different than the original or previous test modules.

#### 2.1.12 Coordination

When situations arise that require a departure from these instructions please request guidance from the National Maritime Center (NMC-2) in writing (e-mail is acceptable). State the officer endorsement or rating endorsement for which application has been made, and why the applicant's circumstances are different from the norm. NMC will respond in writing to all Regional Exam Centers (RECs). In a spirit of fairness and in order to foster good customer relations, all applicants are to be treated the same, regardless of where the applicant is being served.

#### 2.1.13 Multiple Ratings

When a candidate requires testing for multiple ratings, the following method for assigning modules will be employed:

- a) Compare all modules from each of the applicable ESS
- b) Modules duplicated only need to be administered once
- c) All other modules for both ratings are required

#### 2.1.14 Oral Assisted Examinations

IAW 46 CFR 11.205(f)(i). Any applicant for a deck or engineering endorsement limited to vessels not exceeding 500 gross tons, or an endorsement limited to un-inspected fishing industry vessels, may request an oral-assisted examination in lieu of any written or other textual examination. If there are textual questions that the applicant has difficulty reading and understanding, the OCMI will offer the oral-assisted exam. Each endorsement based on an oral-assisted examination is limited to the specific route and type of vessel upon which the applicant obtained the majority of service.

IAW 46 CFR 12.15-9(a)(c). Each applicant for certification as a qualified member of the engine department (QMED) in the rating of oiler, watertender, fireman, deck engineer, refrigeration engineer, junior engineer, electrician, or machinist shall be examined orally or by other means and only in the English language on the subjects listed in 46 CFR 12.15-9(b). The applicants' general knowledge of the subjects must be sufficient to satisfy the examiner that he/she is qualified to perform the duties of the rating for which he/she makes application. Please see additional information at the end of this section (Page 1-18).

#### 2.1.15 Renewal Exams

In accordance with 46 CFR 10.227: Renewal exams are required only if applicant does not have the required sea service for renewal, does not have closely related shore side experience, or has not taken an approved refresher course. Deck officer endorsements renewing with closely related shore side experience service must complete a Rules of the Road Examination (see 46 CFR 10.227(i)(D)). Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

In accordance with 46 CFR 10.227 (e): Applicants for renewal who do not meet the sea service or exam requirements may be issued a Document of Continuity. Documents of continuity do not expire and are issued solely to maintain an individual's eligibility for renewal. A document of continuity does not entitle an individual to serve as a merchant mariner. A holder of a document

of continuity may obtain a properly endorsed, valid MMC at any time by satisfying the requirements for renewal.

A sample copy of the Renewal Exam Letter issued by the Regional Exam Center is provided on page <u>1-21</u> of this manual.

#### 2.1.16 Custody and Security

Compromise of an examination module causes the removal of that module from service and requires that a replacement be generated. To reduce the possibility of compromise, standard security procedures must be instituted at each Regional Exam Center (REC). It is essential that proper security procedures be conscientiously executed by all involved parties. The following procedures should be followed:

- a) Examination Log: A log of all applicants shall be maintained.
- b) Compromises: A compromise occurs when the possibility exists that the contents of a module have been exposed to unauthorized personnel. If this situation occurs, notify the Exam Administration Branch, NMC-2, at the National Maritime Center. Advise the NMC-2 staff of the situation and the probability of actual exposure to unauthorized personnel.
- c) Stowage: Properly stow any printed modules in a lockable container such as a safe or file cabinet. At the close of the workday, account for any and all printed modules.
- d) Destruction of Examination Materials: Applicants shall return to the examiner all exam booklets, scrap paper, charts and other work materials used during the examination process. This material should be destroyed, following any pending challenges have been made, in a manner that results in an unusable format.
- e) Receipt of Printed Modules: Upon receipt of printed modules for special situations such as supplying a Traveling Exam Team (TET), an inventory of the shipment shall be taken and compared with the forwarding letter. Any deficiencies, such as damage, evidence of tampering, etc. shall be reported to the Exam Administration Branch, NMC-2, at the National Maritime Center.

#### 2.2 Rules of the Examination Room

١.	The normal work hours for this REC are	: to	T	he exam roon	n will be	opened f	rom
	to						

- 2. Handbags, briefcases, pagers, cellular phones, books, notes, etc. are not allowed in the Exam Room. The applicant is to provide their own plotting equipment. Programmable calculators are not allowed in the exam room. During the examination, the applicant may not refer to any material other than that specifically authorized by the United States Coast Guard.
- 3. Any applicant engaged in any form of cheating during the exam, such as, referring to concealed notes, communicating with or copying work from other applicants, removing written material from the exam room, or any other dishonest practice, will be dismissed from the exam room and will be considered to have failed the entire exam. A re-exam will not be permitted for six months. Those applicants already holding a Merchant Mariner's Document or Coast Guard endorsement may be summoned to appear before an Administrative Law Judge where their endorsement may be suspended, or revoked, or other penalties assessed.
- 4. Applicants are not permitted to leave the exam room before a module is completed. Head (restroom) calls are not normally permitted. However, if required, the applicant shall be escorted to insure that no attempt is made to access additional information related to the exam. See Item #3. Upon completion of a module, all reference publications must be returned to their proper location in the exam room. The answer sheet and scratch paper is to be placed inside of the front cover of the booklet and given to the Examiner.
- 5. Eating and drinking is not permitted in the exam room.
- 6. Administration of modules is in the order chosen by the applicant at the time the appointment to test was made or before the first module is administered. If no order was chosen, then the administration of the modules will be made in the order listed in the ESS. An applicant may attempt as many modules as can be completed within the normal working hours of the examination room, provided a minimum of two modules are completed per day, with 3½ hours allowed for each module. All modules must be completed on consecutive days within the same week.
- 7. Once a module has been started, the applicant is obligated to complete it. If an answer sheet is submitted with unanswered questions, these questions will be considered to have been answered incorrectly, which may result in a failing score.
- 8. Do not write or mark in the test booklets or any reference material. If the applicant notices any marks in a test booklet or in any reference material, please notify the Examiner.
- 9. The applicant must darken the appropriate spaces for their social security number, module number and test number at the top of the answer sheet form (CG-5164). The Examiner WILL NOT ACCEPT for grading, any answer sheet whose information block at the top of the form is incomplete.
- 10. If the applicant feels a question is faulty, unclear, or has no correct answer indicated, they should choose the best answer, mark the answer sheet accordingly, and complete a COMMENT-CHALLENGE SHEET provided by the Examiner. Explain as clearly as possible the specific concern or objection to the question. If the applicant feels there is a better answer, he/she must show how they arrived at their answer including all computations for navigation and other mathematical problems. An answer must be indicated on the answer sheet. Once the applicant has reviewed the answer sheet and leaves the exam room for ANY REASON before submitting their challenge, the challenge will not be accepted.
- 11. The Examiner is always available to assist the applicant. However, the Examiner cannot discuss question content with the applicant. See Item 10.

	E YEAR approval peri-	on.	
GNATURE: DATE:			

# 2.3 Comment – Challenge Sheet

(For Coast Guard use only)	COMMENT _	CHALLENGE	
APPLICANT'S NAME			
MODULE NAME			
MODULE NUMBER:/	//	_//	
QUESTION NUMBER:			
i.e., no correct answer, or that y question is poorly worded, plea	ou believe there is mor se submit a Comment s	on that prevents it being answered correct than one correct answer shown, or the sheet. Though your Comment(s) will and will be used to improve the quality	he not
opportunity to review each questive, and prior to leaving the two questions. Provide in the spinclude your reasons and all cal	stion for which credit we exam room, you may so pace below, what you be culations for math probave reviewed your answ	ne question, you will be given the was not given. Immediately after the submit Challenge sheets for no more the believe to be the correct answer. You blems such as pump capacity, navigation were sheet and leave the exam room for e(s) will not be accepted.	must on,
SIGNATURE:		DATE:	

#### 2.4 Duties of an Examiner

The examiner will verify the order of modules either at the time the appointment to test has been made or prior to when the first module is administered. At the appropriate time, the examiner selects the modules from MMLD PROD and downloads the appropriate modules AND answer keys in preparation for the applicant's examination. The examiner is responsible on the day of testing to ensure the modules being administered are valid. Any examination which is printed in advance must be kept in a locked secure area with no access to other mariners or non-REC employees.

On the appointed morning after the appropriate exam fees are paid, the examiner identifies the applicant, reviews with the applicant the test procedures, reference material that may be available, and the operating procedures and rules of conduct during the exam. The applicant is given the initial module, a blank answer sheet with complete instructions for completion of required fields and instructions specific to the particular test module. After the applicant completes the module and submits the answer sheet, the examiner is to perform an initial review to ensure that it is completed correctly. The applicant may then be given another test module if time permits and the applicant desires, or further testing may be deferred until the afternoon session or the following morning.

The answer sheet is scored, the applicant informed of the results, and the results entered on the appropriate record. If the applicant has failed the module by no more than one question, the examiner will allow a review of the module and submission of a challenge by the applicant. If the applicant desires to submit a challenge, they cannot leave the examination room until the challenge process is completed. No outside references may be utilized by the applicant for the purpose of substantiating a challenge. If a challenge is submitted, the examiner faxes it to the National Maritime Center for review. Upon receipt of the results of the review, the applicant is advised. These procedures continue until the applicant has completed all modules that are part of the examination.

During the actual testing, the examiner oversees the exam room to preclude cheating, answers procedural questions, and provides information if the applicant desires to comment on a question. If cheating is detected, the examiner takes steps to bar the applicant from further testing for six months. At the end of the workday, the examiner accounts for all modules used; destroys used modules, scrap paper, and used charts; and prepares for the next day of testing.

After the final module is completed, examiner will make entries into MMLD and send email to <u>D05-PF-NMC-5-Testingnotification@uscg.mil</u> for endorsement issuance. If the applicant failed the examination, the applicant is advised of the next steps in the testing process and another examination date is scheduled if the applicant remains eligible.

#### 2.5 Examiner Checklist

- 1. The examiner downloads the appropriate test modules AND answer keys from MMLD PROD in preparation for the applicant's examination. Check exam for the correct number of illustrations and format. Notify the NMC Exam Team of any discrepancies.
- 2. Review reference material to ensure that sufficient copies are available.
- 3. Ensure that consumables (answer sheets, scrap paper, pencils) are adequate.
- 4. Ensures that furniture in the exam room is adequate for intended use and in good, safe condition. If not, takes appropriate action to remedy.
- 5. Ensure that the applicant has read and signed a copy of *Rules of the Examination Room*.
- 6. Ensure that the applicant has darken the appropriate spaces for their social security number, module number and test number at the top of the form as well as their choice of answer for each question.
- 7. Any Comment-Challenge submitted to NMC-2 must include a copy of the applicant's graded answer sheet.
- 8. Upon completion of testing, the examiner accounts for all modules used. Destroy used modules, scrap paper, and used charts promptly.
- 9. Upon completion of each module, examiner will enter score into MMLD.
- 10. After the final module is completed, examiner will make entry into MMLD and notify D05-PF-NMC-5-Testingnotification@uscg.mil for endorsement issuance. Signed "Rules of the Examination Room" are to be sent to NMC-5 or scanned and attached to the mariner's record in MMLD
- 11. Checks examination room after closing for evidence of cheating and takes appropriate action to identify the cheater if evidence is found.

#### 2.6 Orally Assisted Examinations

Orally assisted examinations are permitted by 46 CFR 11.205(f)(1)(i)<sup>1</sup>. Applicants should attempt the standard written examination initially. If they demonstrate difficulty in reading, they may test with an orally assisted examination. This is a time consuming process. Encourage applicants to test with the standard modules and advise them of the limitations to be placed on the endorsement. Only the OCMI/REC is authorized to administer an orally assisted examination.

The following procedures shall be followed in administering an orally assisted examination:

- a. <u>Standard Modules.</u> Candidates will normally be tested with standard examination modules unless a locally prepared module is appropriate.
- b. Reading of Questions. The examiner shall read the questions to the applicant exactly as they are printed in the module. Read the questions in a normal tone of voice with the proper inflections as indicated by normal usage of the English language. When reading the four possible answers, read each one with the same tone. Do not stress or give any other indication of the correct answer. Questions may be repeated once to ensure understanding by the applicant. Do not discuss the content or meaning of either the questions or the possible answers.
- c. <u>Recording of Answers</u>. Record the answers on a standard answer sheet. If standard modules are used to test the applicant, a notation to this affect shall be enclosed in the applicant's file. If locally prepared modules are used, the subjects included in the test must be listed in the file as indicated in 46 CFR 11.205 (f)(1)(ii).
- d. <u>Renewal of Endorsements</u>. Endorsements issued as a result of an orally-assisted examination may be renewed through an oral-assisted renewal exercise.

<sup>1</sup>46 CFR 11.205 (f)(1)(i): "Any applicant for a deck or engineer officer endorsement limited to vessels not exceeding 500 GRT, or an officer endorsement limited to uninspected fishing-industry vessels, may request an oral-assisted examination in lieu of any written or other textual examination. If there are textual questions that the applicant has difficulty reading and understanding, the OCMI will offer the oral-assisted examination. Each officer endorsement based on an oral-assisted examination is limited to the specific route and type of vessel upon which the applicant obtained the majority of service."

#### 2.7 Traveling Examination Teams

Since the mid-1980's the Coast Guard has employed the use of Traveling Examination Teams (TETs) in an effort to provide qualified mariners, located in regions of considerable distance from an REC, the ability to take required examinations without having to travel. This longstanding practice continues today and outlined below are the steps necessary to request a TET:

- 1. A TET is appropriate whenever a group of at least 20 applicants in one remote area have been determined to be fully qualified for examination, e.g. 'Approved to Test'. A remote area is one that that is more than 150 miles from the nearest REC.
- 2. Submit a written TET request to:

Commanding Officer United States Coast Guard National Maritime Center (NMC-11) 100 Forbes Drive Martinsburg, WV 25404

Attn: TET Request

Or D05-DG-NMCTETRequest@uscg.mil

- 3. All TET requests must be received at least twenty (20) days prior to the requested examination date and shall include a complete list of qualified applicants (first name, middle name, last name and mariner reference number).
- 4. RECs should provide NMC22 with a list of exam modules utilized for TETs.
- 5. All TET requests shall also include signed Letter of Undertaking (LOU). See Figure 2 sample LOU. Title 46 United States Code 7504 authorizes the reimbursement of Coast Guard expenses incurred in conducting credentialing services at a location other than an REC. Accordingly, before services can be scheduled this office must be assured that the Coast Guard will be reimbursed for the expenses incurred e.g. travel and subsistence expenses.
- 6. Additional TET trips (including foreign TET trips) may be scheduled at the discretion of the Officer in Charge, Marine Inspection (OCMI).
- 7. The following procedures will apply to all TET trips:
  - a) Travel Order Number (TONO). When a TET trip is warranted, RECs shall forward a request for a TONO(s) and accounting data to NMC-3. This request should be made by E-Mail or telefax. If the TET trip is approved, a TONO(s) will be issued by NMC-3.
  - b) Letter of Undertaking (LOU). A single billing source must be provided for each group of applicants. This source may be an individual, organization, or company who agrees to reimburse the Coast Guard. This individual, organization, or company shall submit a LOU that must be received by the REC before the commencement of any travel.
  - c) Travel Log. A travel log shall be maintained for each TET trip. If two or more groups are tested on the same trip, the completed log must reflect how the total chargeable expenses should be prorated among the groups (See Figure 3). Travel logs should be retained at the REC.

- 8. Billing: To facilitate billing for the TET trip, the following material shall be submitted to NMC-3 upon completion of the trip:
  - a) Letter(s) of undertaking;
  - b) Copy of travel orders (CG-4251);
  - c) Copy of travel voucher or sub voucher (DD 1351-2); and
  - d) Copy of travel summary of expenses from HRSIC
- 9. Acceptance of In-Kind Travel and Travel-Related Expenses: The acceptance of company or applicant supplied meals, transportation, or lodging is prohibited, unless no other arrangements (e.g., for reimbursement in accordance with 46 U.S.C. 7504 and the procedures set forth in paragraph 6.D. of this Volume) can be made; and the acceptance of such expenses complies with the requirements of the Standards of Ethical Conduct for Employees of the Executive Branch, 5 CFR 2635. If it is necessary to accept in-kind and travel-related expenses, prior approval shall be obtained from NMC-3. Remember that the examination procedure is the only means available to the Coast Guard for determining an applicant's professional competence. Thus, the same vigilance used in the REC examination room must be maintained in external relationships with those requesting TET assistance.

16721
Dear Sir:
Title 46 United States Code 7504 authorizes the reimbursement of Coast Guard expenses incurred in conducting licensing and/or seaman documentation services at a location other than at the Regional Examination Center. That reimbursement is limited to travel and subsistence expenses.
Accordingly, before the service you have requested in your (letter) (telephone call) of can be scheduled; this office must be assured that the Coast Guard will be reimbursed for the expenses incurred. This assurance may be provided by completing and signing the enclosed Letter of Undertaking and returning it to this office. The letter also certifies that you will provide adequate testing facilities for the requested service.
The following conditions must normally be met before a TET will be authorized:
1. There are at least 20 applicants whose applications have been evaluated and found to be qualified.
2. A TET trip will normally be provided only for locations in excess of 150 miles from this office or another TET site.
3. The completed application and supporting documents for each individual must be received by this office at least ten working days prior to the anticipated testing date.
4. Only individuals with previously approved applications will be examined.
Sincerely,
Encl: (1) Letter of Undertaking

Figure 2-1 Sample Response to TET Request

(Date)	
To: Officer in Charge, Marine Inspection	
(DEG.	
(REC zone)	
LETTER OF U	NDERTAKING
I agree to reimburse the U.S. Coast Guard for all with the Traveling Examination Team services pe	rformed at
I further understand that I must provide suitable to	esting facilities for these testing services.
(Signature and title)	
Name and Address: (for billing)	
Daytime telephone:	

Figure 2-2 Letter of Undertaking

#### 2.8 Materials Allowed in the Examination Room: Deck Exams

The following charts and materials will be provided in the examination room for use by the Deck endorsement applicants for all modules EXCEPT the Rules of the Road module.

Order replacement copies through the Defense Logistics Agency /WEBREQ: http://www.aviation.dla.mil/rmf/

**Table 2-1 Allowable Exam Room Materials** 

Publication	National Stock Number (NSN)
Chart 12221TR – Chesapeake Bay (Training)	7642-01-401-4083
Chart 12354TR – Long Island Sound (Training)	7642-01-400-7619
Chart 13205TR – Block Island Sound (Training)	7642-01-400-7618
Chart 18531 – Columbia River	7642-01-401-1617
Great Circle Tracking Chart WOXZC5270	7642-01-400-9540
Great Circle Tracking Chart WOXZC5274	7642-01-400-9543
Publication No. 102 – International Code of Signals	7642-01-400-8462
Light List Volume V – Mississippi River System (recent edition)	7642-01-401-1120
Maneuvering Board WOBZP 5090	7642-01-400-9445
Plotting Sheet VPO SX001 – Universal	7642-01-400-9344
Plotting Sheet WOBZP 923 (17° - 24°)	7642-01-400-9447
Plotting Sheet WOBZP 924 (23° - 30°)	7642-01-400-9453
Publication No. 229 – Volume 2, Latitudes 15°- 30°	7642-01-400-9225
Publication No. 117 – Radio Navigational Aids	7642-01-401-0071

#### For product information & ordering:

National Aeronautical Charting Office (NACO) Sales: 1-800-638-8972

Go to website <a href="http://faacharts.faa.gov/Catalog.aspx?a=NAUT+NOS">http://faacharts.faa.gov/Catalog.aspx?a=NAUT+NOS</a> to order online. Although most NGA navigational publications are no longer offered in printed form from US Government sources, authorized reproductions of these publications can still be purchased from commercial vendors. Known commercial vendors of authorized reproductions are listed below:

- ProStar Publications Inc.
- Maryland Nautical
- Landfall Navigation
- American Nautical Services
- Waypoint
- Safe Navigation, Inc.

Order from the National Weather Service: (301) 713-1677 x 129:

- Ship's Code Card, Form WS TA B-O-7
- Ship's Weather Observations WS FORM B-80

Should be distributed automatically by the GPO (202) 512-1800 - Code of Federal Regulations

•	33 CFR Parts 1 to 124	46 CFR Parts 90 to 139
•	33 CFR Parts 125 to 199	46 CFR Parts 140 to 155
•	46 CFR Parts 1 to 40	46 CFR Parts 156 to 165
•	46 CFR Parts 41 to 69	46 CFR Parts 166 to 199
•	46 CFR Parts 70 to 89	49 CFR Parts 100 to 185

#### CIM 16616.6A, Chemical Data Guide

For "In House" help call: P.O. Mike Kyser (CGHQ)

Telephone (202) 475-3520

Available from any one of the three Corps of Army Engineer Map Sales Offices listed below: Flood Control and Navigation Maps of the Mississippi River, Cairo, IL to the Gulf of Mexico (Ed. 2007)

- U.S. Army Engineer District Memphis, TN (901) 544-3351
- U.S. Army Engineer District Vicksburg, MS (601) 634-5710
- U.S. Army Engineer District New Orleans, LA (504) 862-1823

Table 2-2 Allowable Exam Room Materials Available from NMC1

Publication Title	Publication Number
Operating Manual DEEP DRILLER (MODU exams)	COMDTPUB P16721.29
Operating Manual COASTAL DRILLER (MODU exams)	COMDTPUB P16721.30
Stability Data Reference Book	COMDTPUB P16721.31
Manual for loading the M/V GRAND HAVEN (Great Lakes exams)	COMDTPUB P16721.32
Reprints from the Light Lists and Coast Pilots	COMDTPUB P16721.38
Reprints from the Tide Tables and Tidal Current Tables	COMDTPUB P16721.46
The American Practical Navigator, Volume II – 1981 Edition (Bowditch)	HO PUB No.9
Training Nautical Almanac	GPO SN 040-000-00418-1

#### May be locally produced:

- Stability work sheets
- Radar plotting sheets

# May be provided by the applicant:

- Star Finder 2102-D or equivalent
- Calculator See Exam Room Materials Section of the Instructions for rules concerning calculator use.
- Plotting tools i.e. dividers, triangles, nautical slide rule

RENEWAL OPEN-BOOK EXAM(S)			
Mariner's Last Name:			
Mariner#:			

This letter is in response to your application for renewal of your Merchant Mariner Credential. To fulfill your professional requirements for renewal of your credential you must complete the enclosed open-book renewal exercise(s). Enclosed you will find the following modules:

You may use any reference material to complete the examination. A grade of 90% is required to pass each module. Answer sheet(s) and examinations must be returned to the Regional Examination Center.

Once you receive your examinations, you have a total of three (3) months from the date of this letter to complete the exam cycle (this includes 2nd and 3rd attempts).

#### **Retest Policy.**

- a) If after your first attempt, you do not receive a passing score (90%) you will be sent a new examination(s) for a re-test, (provided you are still within the three (3) month test cycle). If you do not receive a passing score on your second attempt, you will receive a third and final examination(s), (provided you are still within the three (3) month test cycle).
- b) For unlimited endorsements if you do not successfully complete all parts of the examination during the three (3) month period from the date the open book exam was sent, a complete reexamination must be taken no sooner than (3) months from the date of the last retest, and a new examination fee is required. Reference 46 CFR 11.217. Payment can be made at www.pay.gov.com; select agency list; United States Coast Guard; Merchant Mariner User Fee Payment submit a copy of the receipt to the Regional Exam Center.
- c) All other examinations if you do not successfully complete all parts of the examination during a (3) month period from the date open book exam sent, a complete reexamination must be taken no sooner than (2) months from the date of the last retest, and a new examination fee is required. Reference 46 CFR 11.217. Payment can be made at www.pay.gov.com; select agency list; United States Coast Guard; Merchant Mariner User Fee Payment submit a copy of the receipt to the Regional Exam Center.
- d) All testing including retesting must be completed within the original National Maritime Center approval period of 1 year, the above applies to the administration of the exams and does not reduce or extend the original 1 year approval period.

If you have any questions, please feel free to contact the NMC at 1(888) 427-5662.

Figure 2-3 Sample Renewal Open Book Exam Letter

#### 3. ENGINEERING GUIDE

#### 3.1 General Instructions for the Administration of Engineering Exams

- 1. The Engine Guide is divided into four sections, according to the engineering level for which an applicant will be examined. Each section contains an introduction and the examination structure sheets for administering all engineering exams and required subjects. The sections for the unlimited and limited engineering officer endorsement examinations also contain an index to the examinations within the section and a quick reference table.
- 2. This introduction lists general policy applicable to all engineering examinations in each section.
- 3. The quick reference sheet shows at a glance the number of modules required for each examination and provides a quick comparison of the total number of modules required to test an applicant at each endorsement level.
- 4. A module code is a five-digit number that specifically identifies an examination module. The first digit specifies the endorsement area of the exam; e.g., 5XXXX, upper level endorsements; 6XXXX, lower level endorsements; and 8XXXX, QMED ratings. The second digit specifies the level of the exam, such as 50XXX, upper level, chief engineer, unlimited horsepower. The third digit specifies the examination subject area, such as 504XX, upper level, chief engineer, unlimited horsepower, electricity. The fourth (4) digit is used to indicate the year in which the module is generated, i.e., 50451 indicates a module generated in the year 2005. The fifth (5) digit represents the version generated in that year, such as modules 50451 and 50452, whereas 1 and 2 are the respective version numbers. Different versions of the test are used to vary the distribution of questions selected from the subject areas included in a typical module and the use of different versions is encouraged.
- 5. Each section provides all the examination structure sheets within the specific section of the Engineering Guide and the numbered, applicable examination structure sheets for a particular examination.
- 6. The order in which the examination structure sheets are presented represent a progression of the unlimited engineer endorsements beginning with the third assistant engineer (53XXX), then second assistant engineer (52XXX), then first assistant engineer (51XXX), and ending with chief engineer (50XXX).
- 7. The applicable examination structure sheet contains the specific policy that applies to a particular endorsement examination and/or its assessment process.

**Table 3-1 Summary of Examination Modules for Engineering** 

SECTION 3.2	2 - UNLIMITED ENGINEERING OFFICER ENDORSEMENTS
<b>Module Code</b>	Module Name
50XXX	Unlimited Chief Engineer
51XXX	Unlimited First Assistant Engineer (Second Engineering Officer)
52XXX	Unlimited Second Assistant Engineer
53XXX	Unlimited Third Assistant Engineer (OICEW)
54XXX	Unlimited Chief / First Assistant Engineer, Endorsement
55XXX	Unlimited Engineering Endorsements, Renewal Exercise
	3.3 - LIMITED ENGINEERING OFFICER ENDORSEMENTS
<b>Module Code</b>	Module Name
60XXX	Chief Engineer, Limited
61XXX	Assistant Engineer, Limited / DDE Unlimited
617XX	Limited Engineering Endorsements, Renewal Exercise
65XXX	Chief Engineer, Un-Inspected Fishing Vessel
66XXX	Assistant Engineer, Un-Inspected Fishing Vessel
69XXX	Designated Duty Engineer, 1000/4000 Horsepower
70XXX	Chief Engineer (OSV)
71XXX	Engineer (OSV)
	3.4 - MODU ENGINEERING OFFICER ENDORSEMENTS
<b>Module Code</b>	Module Name
62XXX	Chief Engineer, (MODU)
63XXX	Assistant Engineer, (MODU)
64XXX	Limited Engineering (MODU), Renewal Exercise
	ECTION 3.5 - ENGINE RATINGS ENDORSEMENT
<b>Module Code</b>	Module Name
810XX	Junior Engineer
820XX	Deck Engineer
830XX	Electrician
840XX	Refrigeration Engineer
850XX	Machinist

SECTION 3.5 - ENGINE RATINGS ENDORSEMENT (continued)			
<b>Module Code</b>	Module Name		
860XX	Fireman / Watertender		
870XX	Oiler, Steam and Motor		
880XX	Pumpman		
890XX	Oiler, Motor Vessels		
900XX	QMED Renewal Exercise		

#### 3.2 Unlimited Engineer Officer Endorsements

This section details endorsements for Third Assistant Engineer (OICEW), Second Assistant Engineer, First Assistant Engineer (Second Engineering Officer), and Chief Engineer.

#### 3.2.1 Administration of Upper Level Officer Endorsement – Engineering Exams

#### 3.2.1.1 Scheduling Exam Time Limits and Grading Policy

A time limit of 3½ hours will be provided to each applicant to complete a test module except as necessary to accommodate the working hours of the examination room. Applicants starting to test in the morning, at the opening of the exam room, should be able to complete a minimum of two modules that day when two or more modules in an examination are to be administered. If they desire, and time permits, they may complete more than two modules. Applicants starting a module late in the afternoon should be advised that it must be completed by the normal closing time; unanswered questions will be graded as wrong answers. An applicant for an upper level endorsement must complete the entire exam on consecutive days. To eliminate confusion the modules should be administered in the published order. A minimum score of 70% is required to pass each module, except for the renewal exercise module, which requires a 90% to pass. All modules for engineers should be graded individually.

#### 3.2.1.2 Examination Cycles

Subject to the requirements of *Section 3.2.1.1*, *Scheduling Exam Time Limits and Grading Policy*, the examination cycle may begin on any day, and at anytime during the day as designated by the REC.

#### 3.2.1.3 Reference Material

Engineering exam illustrations will be provided at the back of each exam module booklet. With the exception of providing the regulations, *46 CFR Parts 1-199* and *33 CFR Parts 1-199*, no other reference materials are permitted except for the open book renewal exercise. Only non-programmable calculators are permitted.

# 3.2.1.4 Increasing the Scope of Propulsion Mode for Chief, First, Second and Third Assistant Engineers

Applicants wishing to increase the scope of their propulsion mode to STEAM and/or MOTOR are required to be tested with specific modules in the new propulsion area. The complete list of required modules is defined for Third Assistant Engineer in ESS 1-1 thru 1-5, for Second

Assistant Engineer in ESS 1-6 thru 1-9, for First Assistant Engineer in ESS 1-10 thru 1-13 and for Chief Engineer in ESS 1-14 thru 1-17.

# 3.2.1.5 Limited Chief Engineer Cross Over to Unlimited Third or Second Assistant Engineer

A Chief Engineer - Limited (Near Coastal) desiring to crossover to Third Assistant Engineer-Unlimited is to be tested on all Third Assistant modules regardless of the issuing date of their Chief Engineer - Limited endorsement. A Chief Engineer - Limited (Oceans) desiring to crossover to Second Assistant Engineer - Unlimited is to be tested on all Second Assistant modules regardless of the issuing date of their limited Chief Engineer endorsement. These candidates must also satisfy the requirements of STCW, including documentation of the successful completion of all practical demonstrations. (46 CFR 10.514, 10.516)

#### 3.2.1.6 Renewal Exercise

The endorsement renewal exercises for Chief, First, Second, and Third Assistant Engineers are consolidated into one open book exercise for each propulsion mode being renewed.

#### **3.2.1.7 Questions**

Any questions regarding engineering endorsement or document examinations should be referred to the National Maritime Center, Examination Administration Branch, Engineering Team at: **D05-DG-NMCETeam@uscg.mil** 

# 3.2.2 Examination Structure Sheets Index

# **Upper Level Engineering Officer Endorsements**<sup>1</sup>

# **Operational Level**

Exam Title	Exam Structure Sheet	(ESS)
Original		
Third Assistant Engineer (OICEW), Motor	ESS	1-1
Third Assistant Engineer (OICEW), Steam	ESS	1-2
Third Assistant Engineer (OICEW), Steam and Motor	ESS	1-3
Third Assistant Engineer (OICEW), Gas Turbine	ESS	1-4
Increase in Scope		
Third Assistant Engineer (OICEW), Steam, Motor, or Gas Turbine	ESS	1-5
Raise in Grade		
Second Assistant Engineer, Motor	ESS	<u>1-6</u>
Second Assistant Engineer, Steam	ESS	1-7
Second Assistant Engineer, Steam and Motor	ESS	1-8
Increase in Scope		
Second Assistant Engineer, Steam, Motor, or Gas Turbine	ESS	<u>1-9</u>
Management Level		
Raise in Grade		
First Assistant Engineer (Second Engineering Officer), Motor	ESS	1-10
First Assistant Engineer (Second Engineering Officer), Steam	ESS	1-11
First Assistant Engineer (Second Engineering Officer), Steam and	MotorESS	1-12
Increase in Scope		
First Assistant Engineer (Second Engineering Officer), Steam, Mo	tor, or Gas Turbine	
	ESS	1-13
Raise in Grade		
Chief Engineer, Motor	ESS	1-14
Chief Engineer, Steam	ESS	1-15
Chief Engineer, Steam and Motor	ESS	1-16
Increase in Scope		
Chief Engineer, Steam, Motor, or Gas Turbine	ESS	1-17

#### **Operational & Management Level**

#### Renewal

Unlimited Engineering, Motor	1-18
Unlimited Engineering, Steam	1-19

<sup>&</sup>lt;sup>1</sup>Any Gas Turbine Propulsion endorsement to a Steam and/or Motor upper level endorsement may be added only after the applicant has provided evidence of successful completion of an approved Gas Turbine Training course at the level of the requested endorsement and the appropriate sea service has been documented (as per NVIC 02-01).

# 3.2.3 Quick Reference - Upper Level - Engineering Endorsement

*NOTE:* **X** *indicates a module that is part of the core exam.* 

#### 3.2.3.1 Third Assistant Engineer (OICEW)

	Module	Steam	Motor	Steam
<u>Subject</u>	Code	Only_	Only_	<u>&amp;</u>
<u>Motor</u>		-		
Motor Plants, Part I	531		X	X
Motor Plants, Part II	532		X	$\mathbf{X}$
Engineering Safety & Environmental Protection	534	$\mathbf{X}$	X	$\mathbf{X}$
General Subjects	535	$\mathbf{X}$	X	$\mathbf{X}$
Electricity, Electronics & Control Engineering	536	$\mathbf{X}$	X	$\mathbf{X}$
Steam Plants, Part I	537	$\mathbf{X}$		$\mathbf{X}$
Steam Plants, Part II	538	$\mathbf{X}$		$\mathbf{X}$

# 3.2.3.2 Second Assistant Engineer <sup>1</sup>

	Module	Steam	Motor	Steam
Subject	<u>Code</u>	<u>Only</u>	Only_	<u>&amp;</u>
Motor				_
Motor Plants, Part I	521		X	X
Motor Plants, Part II	522		X	X
Engineering Safety & Environmental Protection	525	$\mathbf{X}$	X	X
General Subjects	523	$\mathbf{X}$	X	X
Electricity, Electronics & Control Engineering	524	$\mathbf{X}$	X	X
Steam Plants, Part I	526	$\mathbf{X}$		X
Steam Plants, Part II	527	X		X

## 3.2.3.3 First Assistant Engineer (Second Engineering Officer)

	Module	Steam	Motor	Steam
<u>SUBJECT</u>	<u>Code</u>	<b>Only</b>	<b>Only</b>	& Motor
General Subjects, Part I	511	X	X	X
General Subjects, Part II	512	X	X	X
Steam Plants, Part I	513	X		X
Electricity, Electronics & Control Engineering	514	X	X	X
Engineering Safety & Environmental Protection	515	X	X	X
Motor Plants, Part I	516		X	X
Endorsement, Steam Plants, Part II	545	X		X
Endorsement, Motor Plants, Part II	547		X	X

# 3.2.3.4 Chief Engineer <sup>1</sup>

	Module	Steam	Motor	Steam
SUBJECT	Code	<u>Only_</u>	Only_	& Motor
General Subjects, Part I	501	X	X	X
General Subjects, Part II	502	X	X	X
Steam Plants, Part I	503	X		X
Electricity, Electronics & Control Engineering	504	X	$\mathbf{X}$	X
Engineering Safety & Environmental Protection	505	X	$\mathbf{X}$	X
Motor Plants, Part I	506		$\mathbf{X}$	X
Endorsement, Steam Plants, Part II	545	X		X
Endorsement, Motor Plants, Part II	547		$\mathbf{X}$	$\mathbf{X}$

## 3.2.3.5 Chief Engineer, Increase in Scope

SUBJECT	Module <u>Code</u>	Steam to <u>Motor_</u>	Motor to <u>Steam</u>
Steam Plants, Part I	503		X
Endorsement, Steam Plants, Part II	545		X
Motor Plants, Part I	506	X	
Endorsement, Motor Plants, Part II	547	X	

# 3.2.3.6 Renewal Exercises <sup>2</sup>

	Module	Steam	Motor
SUBJECT	Code	Only_	Only_
Unlimited Engineering Renewal - Motor	551	<del></del>	$\overline{\mathbf{X}}$
Unlimited Engineering Renewal - Steam	552	X	

<sup>&</sup>lt;sup>1</sup> Any mariner who completed the Third Assistant Engineer Unlimited or First Assistant Engineer Unlimited endorsement examination modules <u>AFTER</u> January 31, 2002, may upgrade to the next endorsement level without further examination, provided they have acquired the required sea service.

<sup>&</sup>lt;sup>2</sup> All renewals encompassing multiple modes of propulsion must take the renewal modules associated with each mode of propulsion being renewed.

### 3.2.4 Examination Structure Sheets: Unlimited Engineer Officer Endorsements

EXAMINATION STRUCTURE SHEET NO. 1-1	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition-	Third Assistan Unlimited Original Motor	nt Engineer (OICEW)	EXAM CODE 53CO
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
531, Motor Plants	s, Part I		70	70
532, Motor Plants	s, Part II		70	70
534, Engineering	Safety & Environmental Pr	otection	70	70
535, General Subjects		70	70	
536, Electricity, I	Electronics & Control Engin	eering	70	70

Applicants requesting an endorsement as Third Assistant Engineer - Unlimited - Motor and having one year of service as Chief Engineer - Limited - Near Coastal - Motor are required to be tested on the above modules as per 46 CFR 11.516(a)(7).

EXAMINATION STRUCTURE SHEET NO. 1-2	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition-	Third A Unlimit Origina Steam		EXAM CODE 53BO
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
534, Engineering Safety & Environmental Protection			70	70
535, General Subjects			70	70
536, Electricity, Electronics & Control Engineering			70	70
537, Steam Plants, Part I			70	70
538, Steam Plants, Part II			70	70

Applicants requesting an endorsement as Third Assistant Engineer - Unlimited -Steam and having one year of service as Chief Engineer - Limited - Near Coastal - Steam are required to be tested on the above modules as per 46 CFR 11.516(a)(7).

EXAMINATION STRUCTURE SHEET NO. 1-3	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition-	Unlimite Original	<del></del>	EXAM CODE 53AO
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
531, Motor Plants	, Part I		70	70
532, Motor Plants, Part II		70	70	
534, Engineering Safety & Environmental Protection		70	70	
535, General Subj	535, General Subjects		70	70
536, Electricity, Electronics & Control Engineering		70	70	
537, Steam Plants, Part I		70	70	
538, Steam Plants	, Part II		70	70

EXAMINATION STRUCTURE SHEET NO. 1-4	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition-	p- <b>Unlimited</b> on- <b>Original</b>		EXAM CODE 53GT
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
534, Engineering Safety & Environmental Protection		70	70	
535, General Subjects		70	70	
536, Electricity, Electronics & Control Engineering		70	70	
586, Gas Turbine	Plants		70	70

A candidate for an Original Third Assistant Engineer Gas Turbine Only endorsement may be examined using the modules above, having provided documentation of receiving gas turbine training and appropriate military sea going service on gas turbine propelled vessels.

EXAMINATION STRUCTURE SHEET NO. 1-5	Endorsement Type- Endorsement Group- Endorsement Action - Endorsement Condition-	Third Assistant Engineer (OICEW) <sup>1</sup> Unlimited Increase in Scope Steam, Motor, or Gas Turbine		EXAM CODE 53AI, 53BI
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
From Motor to Stea	am Exam Code 53AI			
537, Steam Plants, Part I		70	70	
538, Steam Plants, Part II		70	70	

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE		
From Steam to Motor Exam Code 53BI				
531, Motor Plants, Part I	70	70		
532, Motor Plants, Part II	70	70		
From Steam and/or Motor to Gas Turbine <sup>2</sup>				
Gas Turbine Course	OPERATIONAL COURSE			

<sup>&</sup>lt;sup>1</sup>Each applicant, requesting to increase the scope of their existing endorsement, is required to be examined with the above modules specific to the propulsion mode they are applying for.

<sup>&</sup>lt;sup>2</sup> A Gas Turbine endorsement may be added to an existing Steam or Motor endorsement after the applicant has provided the evidence of the successful completion of an approved Gas Turbine training course at the Operational or Management level.

EXAMINATION STRUCTURE SHEET NO. <b>1-6</b>		Second Unlimit Raise in Motor	<del></del>	EXAM CODE 52CR
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
521, Motor Plants, Plants I		70	70	
522, Motor Plants, Part II		70	70	
523, General Subjects		70	70	
524, Electricity, Electronics & Control Engineering		70	70	
525, Engineering Sa	afety & Environmental Protect	ion	70	70

EXAMINATION STRUCTURE SHEET NO. 1-7	Endorsement Group- Unlim	l Assistant Engineer <sup>1,2</sup> ited n Grade	EXAM CODE 52BR
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
523, General Subject	ets	70	70
524, Electricity, Electronics & Control Engineering		70	70
525, Engineering Sa	afety & Environmental Protection	70	70
526, Steam Plants, Part I		70	70
527, Steam Plants, Part II		70	70

EXAMINATION STRUCTURE SHEET NO. 1-8	Endorsement Group- Endorsement Action-	Unlimite Raise in	· <del></del>	EXAM CODE 52AR
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
521, Motor Plants, F	Part I		70	70
522, Motor Plants, Part II		70	70	
523, General Subjects		70	70	
524, Electricity, Electronics & Control Engineering		g	70	70
525, Engineering Safety & Environmental Protection		70	70	
526, Steam Plants, Part I		70	70	
527, Steam Plants, F	Part II		70	70

<sup>&</sup>lt;sup>1</sup>Applicants for Second Assistant Engineer, who were examined for their Third Assistant Engineer endorsement prior to February 01, 2002 and have obtained the required sea service, must be tested on the modules above for a Raise in Grade in both propulsion modes.

<sup>&</sup>lt;sup>2</sup> Applicants for Second Assistant Engineer, who completed training and assessment in accordance with the STCW Code Section A-III/1 and Table A-III/1 and were issued a Third Assistant Engineer endorsement after February 01, 2002, may be issued a Second Assistant Engineer endorsement without further examination, after presenting evidence of the required sea service.

EXAMINATION STRUCTURE SHEET NO. 1-9	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition-	Second Assistant Engineer <sup>1,2</sup> Unlimited Increase in Scope Steam, Motor, or Gas Turbine		EXAM CODE 52AI, 52BI
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
From Motor to Ste	am Exam Code 52AI			
526, Steam Plants, Part I		70	70	
527, Steam Plants, Part II		70	70	
From Steam to Mo	tor Exam Code 52BI			
521, Motor Plants	s, Part I		70	70
522, Motor Plants, Part II		70	70	
From Steam and/or Motor to Gas Turbine				
Gas Turbine Course	Gas Turbine Course		OPERATIONAL	LEVEL

<sup>&</sup>lt;sup>1</sup> Each applicant, requesting to increase the scope of their existing endorsement is required to be examined with the above modules specific to the propulsion mode they are applying for.

<sup>&</sup>lt;sup>2</sup> A Gas Turbine endorsement may be added to an existing Steam or Motor endorsement after the applicant has provided the evidence of the successful completion of an approved Gas Turbine training course at the Operational or Management level.

EXAMINATION STRUCTURE SHEET NO. <b>1-10</b>	Endorsement Type - Endorsement Group- Endorsement Action- Endorsement Condition- Endorsement Condition- Endorsement Condition-  First Assistant (Second Engineering Officer)  Unlimited  Raise in Grade		EXAM CODE 51CO
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
511, General Subjects, Part I		70	70
512, General Subjects, Part II		70	70
514, Electricity, Electronics & Control Engineering		70	70
515, Engineering Safety & Environmental Protection		70	70
516, Motor Plants		70	70

<sup>&</sup>lt;sup>1</sup>All applicants for First Assistant Engineer who have obtained the required sea service, <u>must</u> be tested on the modules above for a Raise in Grade in motor propulsion

EXAMINATION STRUCTURE SHEET NO. 1-11	Endorsement Group- Endorsement Action-	dorsement Group- dorsement Action-  Raise in Grade		EXAM CODE 51BO
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
511, General Subjects, Part I			70	70
512, General Subjects, Part II			70	70
513, Steam Plants			70	70
514, Electricity, Electronics & Control Engineering		70	70	
515, Engineering S	afety & Environmental Prote	ection	70	70

<sup>&</sup>lt;sup>1</sup>All applicants for First Assistant Engineer, who have obtained the required sea service, must be tested on the modules above for a Raise in Grade in steam propulsion.

EXAMINATION STRUCTURE SHEET NO. 1-12	Endorsement Type - Endorsement Group- Endorsement Action- Endorsement Condition-Steam and Condition-Steam	EXAM CODE 51AO	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
511, General Subject	cts, Part I	70	70
512, General Subjects, Part II		70	70
513, Steam Plants		70	70
514, Electricity, Electronics & Control Engineering		70	70
515, Engineering Safety & Environmental Protection		70	70
516, Motor Plants		70	70

<sup>&</sup>lt;sup>1</sup>All applicants for First Assistant Engineer, who have obtained the required sea service, must be tested on the modules above for a Raise in Grade in both propulsion modes.

EXAMINATION STRUCTURE SHEET NO. 1-13	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition- Endorsement Condition- Endorsement Condition- Endorsement Condition- Endorsement Type-  First Assistant (Second Engineering Officer) 1,2  Unlimited  Increasing Scope  Steam, Motor, or Gas Turbine		EXAM CODE 51AI, 51AJ	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
From Motor to Stea	m Exam Code 51AI			
513, Steam Plants			70	70
545, Endorsement Steam Plants, Part II			70	70
From Steam to Motor Exam Code 51AJ				
516, Motor Plants			70	70
547, Endorsement Motor Plants, Part II		70	70	
From Steam and/or Motor to Gas Turbine				
Gas Turbine Course (	Management Level)			

<sup>&</sup>lt;sup>1</sup> Each applicant, requesting to increase the scope of their existing endorsement, is required to be examined with the above modules specific to the propulsion mode they are applying for.

 $<sup>^2</sup>$ A Gas Turbine endorsement may be added to an existing Steam or Motor endorsement after the applicant has provided the evidence of the successful completion of an approved Gas Turbine training course at the Management level.

EXAMINATION STRUCTURE SHEET NO. <b>1-14</b>	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition-	Chief Engineer <sup>1,2</sup> Unlimited Raise in Grade Motor		EXAM CODE 50CR
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
501, General Subje	ects, Part I		70	70
502, General Subjects, Part II		70	70	
504, Electricity, Electronics & Control Engineering		70	70	
505, Engineering Safety & Environmental Protection		70	70	
506, Motor Plants		70	70	

<sup>&</sup>lt;sup>1</sup>Applicants for Chief Engineer, who were examined for their First Assistant Engineer endorsement prior to February 01, 2002 and have obtained the required sea service, must be tested on the modules above for a Raise in Grade in motor propulsion.

<sup>&</sup>lt;sup>2</sup> Applicants for Chief Engineer - Unlimited, who completed training and assessment in accordance with the STCW Code Section A-III/2 and Table A-III/2 and were issued a First Assistant Engineer endorsement after February 01, 2002, may be issued a Chief Engineer - Unlimited endorsement without further examination, after presenting evidence of the required sea service.

EXAMINATION STRUCTURE SHEET NO. <b>1-15</b>	Endorsement Group- Unlimi	ngineer <sup>1,2</sup> ed ı Grade	EXAM CODE 50BR
	MODULES	NUMBER OF QUES	STIONS MINIMUM SCORE
501, General Sub	jects, Part I	70	70
502, General Sub	jects, Part II	70	70
503, Steam Plants	S	70	70
504, Electricity, Electronics & Control Engineering		70	70
505, Engineering	Safety & Environmental Protection	70	70

<sup>&</sup>lt;sup>1</sup>Applicants for Chief Engineer, who were examined for their First Assistant Engineer endorsement prior to February 01, 2002 and have obtained the required sea service, must be tested on the modules above for a Raise in Grade in steam propulsion.

<sup>&</sup>lt;sup>2</sup> Applicants for Chief Engineer - Unlimited, who completed training and assessment in accordance with the STCW Code Section A-III/2 and Table A-III/2 and were issued a First Assistant Engineer endorsement after February 01, 2002, may be issued a Chief Engineer - Unlimited endorsement without further examination, after presenting evidence of the required sea service.

EXAMINATION STRUCTURE SHEET NO. <b>1-16</b>	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition-	Chief Engine Unlimited Raise in Gra Steam and/o	nde	EXAM CODE 50AR
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
501, General Sub	jects, Part I		70	70
502, General Sub	jects, Part II		70	70
503, Steam Plants	S		70	70
504, Electricity, E	Electronics & Control Engine	eering	70	70
505, Engineering Safety & Environmental Protection		70	70	
506, Motor Plants	3		70	70

<sup>&</sup>lt;sup>1</sup>Applicants for Chief Engineer, who were examined for their First Assistant Engineer endorsement prior to February 01, 2002 and have obtained the required sea service, must be tested on the modules above for a Raise in Grade in both propulsion modes.

<sup>&</sup>lt;sup>2</sup> Applicants for Chief Engineer - Unlimited, who completed training and assessment in accordance with the STCW Code Section A-III/2 and Table A-III/2 and were issued a First Assistant Engineer endorsement after February 01, 2002, may be issued a Chief Engineer - Unlimited endorsement without further examination, after presenting evidence of the required sea service.

EXAMINATION STRUCTURE SHEET NO. 1-17	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition-	Chief Engineer <sup>1</sup> Unlimited Increase in Scope Steam, Motor or Gas Turbine		EXAM CODE 50IA, 50IB
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
From Motor to Steam Exam Code 50IA				
503, Steam Plants		70	70	
545, Endorsement Steam Plants		70	70	

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE		
From Steam to Motor Exam Code 50IB				
506, Motor Plants	70	70		
547, Endorsement Motor Plants	70	70		
From Steam and/or Motor to Gas Turbine				
Gas Turbine Course (Management Level)				

<sup>&</sup>lt;sup>1</sup>A Gas Turbine endorsement may be added to an existing Steam or Motor endorsement after the applicant has provided the evidence of the successful completion of an approved Gas Turbine training course at the Management level

EXAMINATION STRUCTURE SHEET NO. <b>1-18</b>	Endorsement Type - Endorsement Group- Endorsement Action - Endorsement Condition- Endorsement Condition- Endorsement Type - Engine Unlimit Renew Motor	al	EXAM CODE 55AB
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
551, Unlimited Engi	neering Renewal Exercise, Motor	70	90

EXAMINATION STRUCTURE SHEET NO. <b>1-19</b>	Endorsement Group- Unli	gineering (RENEWAL) limited newal aam	EXAM CODE 55AC
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
552, Unlimited En	ngineering Renewal Exercise, Stea	eam 70	90

**NOTE:** Renewal exercises are open book.

## 3.3 Limited Engineering Officer Endorsements

This section details endorsements for Engineer (OSV), Chief Engineer (OSV), Chief Engineer, UFIV, Assistant Engineer, UFIV, Chief Engineer (Limited), Designated Duty Engineer, and Assistant Engineer (Limited).

## 3.3.1 Administration of Limited Engineering Officer Exams

#### 3.3.1.1 Overview

The written examination is the final step or capstone in the process for attaining an engineering officer endorsement. All other U. S. Regulatory or STCW requirements must be completed prior to the candidate being examined.

## 3.3.1.2 Time of Examination and Grading Policy

A time limit of 3.½ hours will be provided to each applicant to complete a test module except as necessary to accommodate the working hours of the examination room. Applicants starting to test in the morning, at the opening of the exam room, must complete a minimum of two modules that day when two or more modules in an exam series are to be administered. If time permits, they may complete more than two modules. Applicants starting a module late in the afternoon should be advised that it must be completed by the normal closing time; unanswered questions will be treated as wrong answers. An applicant for a limited officer endorsement must complete the entire exam on consecutive days. All modules are graded separately. A minimum score of 70% is required to pass each module, except for the renewal exercise open book modules, which require 90% to pass.

#### 3.3.1.3 Reference Material

Engineering exam illustrations will be provided at the back of each exam module booklet. With the exception of providing the regulations, 46 CFR Parts 1-199 and 33 CFR Parts 1-199, no other reference materials are permitted except for the open book renewal exercise. Only non-programmable calculators are permitted.

## 3.3.1.4 Examination Cycles

Subject to the requirements of paragraph 1 and 2, the examination cycle may begin on any workday, and at anytime during the day as designated by the REC.

#### 3.3.1.5 Renewal Exercise

The renewal exercises for all limited engineering officer endorsements have been consolidated into one open book exercise.

#### **3.3.1.6 Questions**

Any questions regarding engineering endorsement or document examinations should be referred to the National Maritime Center, Examination Administration Branch, Engineering Team at: **<u>D05-NMCETeam@uscg.mil</u>** 

## 3.3.2 Examination Structure Sheet Index

Exam Title Exam	am Structure Sheets	(ESS)
Assistant Engineer Limited / DDE Unlimited Horsepower, Moto	or ESS	<b>2-1</b>
Assistant Engineer Limited / DDE Unlimited Horsepower, Steam	mESS	<b>2-2</b>
Chief Engineer Limited, Near Coastal, Motor	ESS	2-3
Chief Engineer Limited, Near Coastal, Steam	ESS	2-4
Chief Engineer Limited, Oceans, Motor	ESS	<b>2-5</b>
Chief Engineer Limited, Oceans, Steam	ESS	<b>2-6</b>
Engineer, (OSV)	ESS	<b>2-7</b>
Chief Engineer, (OSV)		2-8
Designated Duty Engineer 1000/4000 Horsepower	ESS	<b>2-9</b>
Assistant Engineer, Uninspected Fishing Industry Vessels	ESS	<b>2-10</b>
Chief Engineer, Uninspected Fishing Industry Vessels	ESS	<b>2-11</b>
Limited Engineer Officer Endorsement Renewal	ESS	2-12
Chief Engineer Limited, Oceans, Steam & Motor	ESS	2-13
Chief Engineer Limited, Near Coastal, Steam & Motor	ESS	2-14
Assistant Engineer Limited / DDE Unlimited Horsepower, Stear	m & Motor ESS	2-15

## 3.3.3 Quick Reference – Limited Engineering Officer Endorsements

*NOTE:* **X** *indicates a module that is part of the core exam.* 

## 3.3.3.1 Assistant Engineer - Limited & Designated Duty Engineer - Unlimited HP

<u>Subject</u>	Module Code	A/E ULTD	DDE ULTD
General Subject	611	$\overline{\mathbf{X}}$	$\overline{\mathbf{X}}$
Motor Plants	612	X	X
Engineering Safety & Environmental Protection	613	X	X
Electricity	614	X	X
Steam Plants	615	$\mathbf{X}$	X

## 3.3.3.2 Chief Engineer – Limited Near Coastal

<u>Subject</u>	Module Code
General Subjects	601
Motor Plants	602
Engineering Safety & Environmental Protection	603
Electricity - Near Coastal	604
Steam Plants	610

## 3.3.3.3 Chief Engineer – Limited Oceans

<u>Subject</u>	Module Code
General Subjects	607
Motor Plants	608
Engineering Safety & Environmental Protection	609
Electricity, Electronics & Control Engineering –Oceans	605
Steam Plants	616

## 3.3.3.4 Engineer – Offshore Supply Vessels:

<u>Subject</u>	Module Code
General Subjects	711
Motor Plants	712
Engineering Safety & Environmental Protection	713
Electricity	714
Survival Craft	706

## 3.3.3.5 Chief Engineer - Offshore Supply Vessels:

<u>Subject</u>	<b>Module Code</b>
General Subjects	701
Motor Plants	702
Engineering Safety & Environmental Protection	703
Electricity	704
Survival Craft	706

## 3.3.3.6 Designated Duty Engineer – 1000/4000 HP:

SubjectModule CodeGeneral Subjects691--Motor Plants692--Engineering Safety & Environmental Protection693--Steam Plants694--

## 3.3.3.7 Assistant Engineer – Uninspected Fishing Industry Vessel

SubjectModule CodeGeneral Subjects661--Motor Plants662--Engineering Safety & Environmental Protection663--

#### 3.3.3.8 Chief Engineer – Uninspected Fishing Industry Vessel

SubjectModule CodeGeneral Subjects651--Motor Plants652--Engineering Safety & Environmental Protection653--

## 3.3.4 Examination Structure Sheets: Limited Engineer Officer Endorsements

EXAMINATION STRUCTURE SHEET NO. <b>2-1</b>	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition- Motor  Endorsement Type- Limited Coriginal Endorsement Condition- Motor		EXAM CODE 61CR
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
611, General Subj	ects	70	70
612, Motor Plants		70	70
613, Engineering Safety & Environmental Protection		70	70
614, Electricity		70	70

<sup>&</sup>lt;sup>1</sup> After January 31, 2002, each applicant for an Assistant Engineer – Limited / DDE – Unlimited HP-Motor endorsement and certificate for STCW 95 must complete the modules listed above to be issued an endorsement.

<sup>&</sup>lt;sup>2</sup> Any applicant who holds an Assistant Engineer-Limited –Motor endorsement that request an endorsement for DDE-Unlimited HP-Motor does not have to complete the above modules.

<sup>&</sup>lt;sup>3</sup> Any applicant who requests an endorsement for Assistant Engineer-Limited-Motor and was issued a DDE-Unlimited-Motor endorsement within the past year does not have to complete the above modules.

EXAMINATION STRUCTURE SHEET NO. 2-2	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition- Endorsement Condition-  Assistant Engineer/ DDE, Unlimited HP 1,2,3  Limited  Original  Endorsement Condition- Steam		EXAM CODE 61CS	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
611, General Subj	ects		70	70
613, Engineering	Safety & Environmental Protec	ction	70	70
614, Electricity		70	70	
615, Steam Plants			70	70

<sup>&</sup>lt;sup>1</sup> After January 31, 2002, each applicant for an Assistant Engineer – Limited / DDE – Unlimited HP-Steam endorsement and certificate for STCW 95 must complete the modules listed above to be issued an endorsement.

<sup>&</sup>lt;sup>3</sup> Any applicant who requests an endorsement for Assistant Engineer-Limited-Steam and was issued a DDE-Unlimited-Steam endorsement within the past year does not have to complete the above modules.

EXAMINATION STRUCTURE SHEET NO. 2-15	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition- Steam & Motor  Endorsement Condition- Steam & Motor		EXAM CODE 61CB
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
611, General Subj	ects	70	70
612, Motor Plants		70	70
613, Engineering	Safety & Environmental Protection	70	70
614, Electricity		70	70
615, Steam Plants		70	70

<sup>&</sup>lt;sup>1</sup> After January 31, 2002, each applicant for an Assistant Engineer – Limited / DDE – Unlimited HP-Steam and Motor endorsement and certificate for STCW 95 must complete the modules listed above to be issued an endorsement.

<sup>&</sup>lt;sup>2</sup> Any applicant who holds an Assistant Engineer-Limited-Steam endorsement that request an endorsement for DDE-Unlimited HP-Steam does not have to complete the above modules.

<sup>&</sup>lt;sup>2</sup> Any applicant who holds an Assistant Engineer-Limited-Steam and Motor endorsement that request an endorsement for DDE-Unlimited HP-Steam and Motor does not have to complete the above modules.

<sup>&</sup>lt;sup>3</sup> Any applicant who requests an endorsement for Assistant Engineer-Limited-Steam and Motor and was issued a DDE-Unlimited-Steam and Motor endorsement within the past year does not have to complete the above modules.

EXAMINATION STRUCTURE SHEET NO. 2-3	Endorsement Group- Lin	ef Engineer <sup>1,2</sup> uited – Near Coastal se in Grade oor	EXAM CODE 60CR
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
601, General Subjects		70	70
602, Motor Plants		70	70
603, Engineering Safety & Environmental Protection		70	70
604, Electricity		70	70

<sup>&</sup>lt;sup>1</sup> Applicants for Chief Engineer – Limited – Near Coastal - Motor endorsement, who were examined for their Assistant Engineer – Limited-Motor endorsement must complete the modules listed above for a Raise In Grade.

<sup>&</sup>lt;sup>2</sup> Applicants for Chief Engineer – Limited – Near Coastal-Motor endorsement, who completed training in accordance with the STCW Code Section A-III/1 and Table A-III/1, and were issued a Third Engineer – Unlimited - Motor endorsement after February 01, 2002, and are to be issued a Second Assistant Engineer – Unlimited - Motor endorsement without further examination, must complete the modules listed above to receive the Chief Engineer – Limited – Near Coastal - Motor endorsement.

EXAMINATION STRUCTURE SHEET NO. 2-4	Endorsement Group- Limi	f Engineer <sup>1,2</sup> ted – Near Coastal e in Grade n	EXAM CODE 60CS
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
601, General Subjects		70	70
603, Engineering Safety & Environmental Protection		70	70
604, Electricity		70	70
610, Steam Plants		70	70

<sup>&</sup>lt;sup>1</sup> Applicants for Chief Engineer – Limited – Near Coastal, who were examined for their Assistant Engineer – Limited endorsement must complete the modules listed above for a Raise In Grade.

<sup>&</sup>lt;sup>2</sup> Applicants for Chief Engineer – Limited – Near Coastal, who completed training in accordance with the STCW Code Section A-III/1 and Table A-III/1, and were issued a Third Engineer – Unlimited endorsement after February 01, 2002, and are to be issued a Second Assistant Engineer – Unlimited endorsement without further examination, must complete the modules listed above to receive the Chief Engineer – Limited – Near Coastal endorsement.

EXAMINATION STRUCTURE SHEET NO. 2-14	Endorsement Group-	Limit Raise	Engineer <sup>1,2</sup> ed – Near Coastal in Grade n & Motor	EXAM CODE 60CB
MO	DDULES		NUMBER OF QUESTIONS	MINIMUM SCORE
601, General Subjects			70	70
602, Motor Plants		70	70	
603, Engineering Safety & Environmental Protection		70	70	
604, Electricity		70	70	
610, Steam Plants		70	70	

<sup>&</sup>lt;sup>1</sup> Applicants for Chief Engineer – Limited – Near Coastal, who were examined for their Assistant Engineer – Limited endorsement must complete the modules listed above for a Raise In Grade.

<sup>&</sup>lt;sup>2</sup> Applicants for Chief Engineer – Limited – Near Coastal, who completed training in accordance with the STCW Code Section A-III/1 and Table A-III/1, and were issued a Third Engineer – Unlimited endorsement after February 01, 2002, and are to be issued a Second Assistant Engineer – Unlimited endorsement without further examination, must complete the modules listed above to receive the Chief Engineer – Limited – Near Coastal endorsement.

EXAMINATION STRUCTURE SHEET NO. 2-5	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition- Moto	EXAM CODE 60AR	
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
605, Electricity and Elec	tronics	70	70
607, General Subjects		70	70
608, Motor Plants		70	70
609, Engineering Safety & Environmental Protection		70	70

Applicants for Chief Engineer - Limited - Oceans, who completed training in accordance with the STCW Code Section A-III/1 and Table A-III/1, and are to be issued a Second Assistant Engineer - Unlimited-Motorendorsement without examination, must complete all modules listed above to receive the Chief Engineer - Limited - Oceans-Motor endorsement.

<sup>&</sup>lt;sup>2..</sup>Applicants who hold a Chief Engineer-Limited-Near Coastal endorsement and request an upgrade to Chief Engineer-Limited-Oceans-Motor must complete the modules listed above.

EXAMINATION STRUCTURE SHEET NO. <b>2-6</b>	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition- Endorsement Condition- Chief Engineer <sup>1,2</sup> Limited – Oceans Raise in Grade Endorsement Condition-		EXAM CODE 60AS
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
605, Electricity and Elec	tronics	70	70
607, General Subjects		70	70
609, Engineering Safety & Environmental Protection		70	70
616, Steam Plants		70	70

Applicants for Chief Engineer - Limited - Oceans-Steam, who completed training in accordance with the STCW Code Section A-III/1 and Table A-III/1, and are to be issued a Second Assistant Engineer - Unlimited-Steam endorsement without examination, must complete all modules listed above to receive the Chief Engineer - Limited - Oceans-Steam endorsement.

<sup>&</sup>lt;sup>2..</sup>Applicants who hold a Chief Engineer-Limited-Near Coastal-Steam endorsement and request an upgrade to Chief Engineer-Limited-Oceans-Steam must complete the modules listed above.

EXAMINATION STRUCTURE SHEET NO. 2-13	Endorsement Group- Limit	Engineer <sup>1,2</sup> ed – Oceans in Grade a & Motor	EXAM CODE 60AB
Me	ODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
605, Electricity and Electronics		70	70
607, General Subjects		70	70
608, Motor Plants		70	70
609, Engineering Safety & Environmental Protection		70	70
616, Steam Plants		70	70

Applicants for Chief Engineer - Limited - Oceans, who completed training in accordance with the STCW Code Section A-III/1 and Table A-III/1, and are to be issued a Second Assistant Engineer - Unlimited endorsement without examination, must complete all modules listed above to receive the Chief Engineer - Limited - Oceans-Steam & Motor endorsement.

<sup>&</sup>lt;sup>2..</sup>Applicants who hold a Chief Engineer-Limited-Near Coastal-Steam & Motor endorsement and request an upgrade to Chief Engineer-Limited-Oceans-Steam & Motor must complete the modules listed above.

EXAMINATION STRUCTURE SHEET No. 2-7	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Condition-  Endorsement Type-  Limited  Original		EXAM CODE 71CC
MC	DDULES	NUMBER OF QUESTIONS	MINIMUM SCORE
711, General Subjects		70	70
712, Motor Plants		70	70
713, Engineering Safety & Environmental Protection		70	70
714, Electricity		70	70
706, Survival Craft		50	70

<sup>&</sup>lt;sup>1</sup> Each candidate for an Engineer - Limited - OSV endorsement, must complete module 706XX if they have not previously completed the assessment of practical skills or completed an approved course of training on personal survival craft that satisfies module 441XX or 706XX.

EXAMINATION STRUCTURE SHEET No. 2-8	Endorsement Type - Chief Engineer <sup>1</sup> Endorsement Group - Limited Endorsement Action - Raise in Grade Endorsement Condition - OSV		EXAM CODE <b>70</b> CF	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
701, General Subjects	S		70	70
702, Motor Plants		70	70	
703, Engineering Safety & Environmental Protection		1	70	70
704, Electricity		70	70	
706, Survival Craft		50	70	

<sup>&</sup>lt;sup>1</sup> Each candidate for an Engineer - Limited - OSV endorsement, must complete module 706XX if they have not previously completed the assessment of practical skills or completed an approved course of training on personal survival craft that satisfies module 441XX or 706XX.

EXAMINATION STRUCTURE SHEET NO. <b>2-9</b>	Endorsement Type - DDE Endorsement Group- Limit Endorsement Action- Origi Endorsement Condition- Steam	nal	EXAM CODE 69CR
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
691, General Subjects		50	70
692, Motor Plants		50	70
693, Engineering Safety & Environmental Protection		50	70
694, Steam Plants		50	70

EXAMINATION STRUCTURE SHEET No. <b>2-10</b>	Endorsement Group - Lin	istant Engineer nited ginal IV	EXAM CODE 66CF
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
661, General Subjects		50	70
662, Motor Plants		50	70
663, Engineering Safety & Environmental Protection		50	70

EXAMINATION STRUCTURE SHEET NO. <b>2-11</b>	Endorsement Group- Endorsement Action-	ief Engineer mited riginal & Raise in Grade FIV	EXAM CODE 65CF
MC	DULES	NUMBER OF QUESTIONS	MINIMUM SCORE
651, General Subjects		70	70
652, Motor Plants		70	70
653, Engineering Safety & Environmental Protection		70	70

EXAMINATION STRUCTURE SHEET NO. 2-12	Endorsement Type- Endorsement Group- Endorsement Action- Endorsement Action- Endorsement Action- Endorsement Type- Engineering (RENEWAL) Limited Renewal		EXAM CODE 61AI
MC	DULES	NUMBER OF QUESTIONS	MINIMUM SCORE
617, Limited Renewal I	Exercise.	70	90

## 3.4 Mobile Offshore Drilling Unit (MODU) Engineering Officer Endorsements

This section details endorsements for Chief Engineer (MODU) and Assistant Engineer (MODU).

#### 3.4.1 Administration of MODU Examinations

## 3.4.1.1 Time of Examination and Grading Policy

A time limit of 3½ hours will be provided to each applicant to complete a test module except as necessary to accommodate the working hours of the examination room. Applicants starting to test in the morning, at the opening of the exam room, must complete a minimum of two modules that day and may complete more if they desire and time permits. Applicants starting a module late in the afternoon should be advised that it must be completed by the normal closing time; unanswered questions will be treated as wrong answers. An applicant for a Mobile Offshore Drilling Unit (MODU) engineer's officer endorsement must complete the entire exam on consecutive days. A minimum score of 70% is required to pass all modules. All examination modules are graded separately. The renewal exercise module requires a minimum score of 90% to pass.

## 3.4.1.2 Examination Cycles

Subject to the requirements of the previous paragraph, the examination cycle may begin on any business day and at anytime during the day as designated by the REC.

#### 3.4.1.3 Renewal Exercise

The renewal exercises for chief and assistant Engineers (MODU) have been consolidated into one open book exercise.

#### 3.4.1.4 Reference Material

Engineering exam illustrations will be provided at the back of each exam module booklet. With the exception of providing the regulations, 46 CFR Parts 1-199 and 33 CFR Parts 1-199, no other reference materials are permitted except for the open book renewal exercise. Only non-programmable calculators are permitted.

#### 3.4.1.5 Questions

Any questions regarding engineering endorsement or document examinations should be referred to the National Maritime Center, Examination Administration Branch, Engineering Team at: <a href="D05-DG-NMCETeam@uscg.mil">D05-DG-NMCETeam@uscg.mil</a>

## 3.4.2 Examination Structure Sheets Index

Exam Title	Exam Structure Sheets	(ESS)
Assistant Engineer - MODU	ESS	3-1
Chief Engineer – MODU	ESS	3-2
Engineering Renewal – MODU	ESS	3-3

## 3.4.3 Quick Reference – MODU Engineering Officer Endorsements

## 3.4.3.1 Assistant Engineer - MODU

SubjectModule CodeGeneral Subject631--Auxiliary Machinery632--Engineering Safety & Environmental Protection633--

## 3.4.3.2 Chief Engineer - MODU:

<u>Subject</u> <u>Module Code</u>

General Subjects 621--Auxiliary Machinery 622--Engineering Safety & Environmental Protection 623--

## 3.4.3.3 Engineering Renewal - MODU:

<u>Subject</u> <u>Module Code</u>

MODU Renewal Exercise 634-

## 3.4.4 Examination Structure Sheets: MODU Engineer Officer Endorsements

EXAMINATION STRUCTURE SHEET NO. <b>3-1</b>	Endorsement Type - Assistant Engineer – MODU Endorsement Group - Original		EXAM CODE 63FO
MODUI	DULES NUMBER OF QUESTI		MINIMUM SCORE
631, General Subjects		50	70
632, Auxiliary Machinery		50	70
633, Engineering Safety & Environmental Protection		50	70

EXAMINATION STRUCTURE SHEET NO. <b>3-2</b>		Chief Engineer - MODU Laise in Grade	EXAM CODE 62ER
MODUI	MODULES NUMBER OF QUESTIONS		MINIMUM SCORE
621, General Subjects		70	70
622, Auxiliary Machinery		70	70
623, Engineering Safety & Environmental Protection		70	70

EXAMINATION STRUCTURE SHEET No. 3-3	Endorsement Type - Engineering (Renewal) <sup>1, 2</sup> Endorsement Group - MODU-Chief and Assistant		EXAM CODE 63EN
MODUI	MODULES NUMBER OF QUESTIONS		MINIMUM SCORE
634, MODU Renewal Exercise		50	90

<sup>&</sup>lt;sup>1</sup> A certificate of completion for a Coast Guard Approved course may be accepted in lieu of the renewal exercise.

## 3.5 Engine Rating Endorsements

The section details endorsements for Pumpman, Machinst, Electrician, Deck Engineer, Junior Engineer, Oiler: Steam & Motor, Oiler: Motor (Limited), Fireman/Watertender, Refrigerating Engineer, and QMED Renewal Exercise.

## 3.5.1 Administration of Engine Ratings Endorsement Examinations

## 3.5.1.1 Time of Examination and Grading Policy

A time limit of  $3\frac{1}{2}$  hours may be provided to each applicant to complete an exam module except as necessary to accommodate the working hours of the examination room. An applicant starting to test in the morning, at the opening of the exam room, may complete a minimum of two modules that day when two different exam modules are requested. They may complete more than two if they desire and time permits. Applicants starting a module late in the afternoon should be advised that it must be completed by the normal closing time; unanswered questions will be treated as wrong answers. A minimum score of 70% is required to pass each module except for the renewal exercise which requires a 90% to pass. All modules are to be graded separately.

## 3.5.1.2 Examination Cycles

Subject to the requirements of paragraph 1, the examination cycle may begin on any business day, and at anytime during the day as designated by the REC.

#### 3.5.1.3 Reference Material

Engineering exam illustrations will be provided at the back of each exam module booklet. With the exception of providing the regulations, 46 CFR Parts 1-199 and 33 CFR Parts 1-199, no other reference materials are permitted except for the open book renewal exercise. Only non-programmable calculators are permitted.

When used in lieu of an examination, the course certificate may only be recognized for obtaining this endorsement and may not be used for any other officer endorsement, rating endorsement, or recency of service.

## 3.5.1.4 Questions

Any questions regarding engineering endorsement or document examinations should be referred to the National Maritime Center, Examination Administration Branch, Engineering Team at: D05-DG-NMCETeam@uscg.mil

## 3.5.2 Examination Structure Sheets Index

Exam Title	<b>Exam Structure Sheets</b>	(ESS)
Junior Engineer	ESS	4-1
Deck Engineer	ESS	4-2
Electrician	ESS	4-3
Refrigeration Engineer	ESS	4-4
Machinist	ESS	4-5
Fireman/Watertender	ESS	4-6
Oiler, Steam, and Motor	ESS	4-7
Pumpman	ESS	4-8
Oiler, Motor Vessels	ESS	4-9
QMED Renewal Exercise	ESS	4-10

## 3.5.3 Quick Reference – Engine Ratings Subject Modules

## 3.5.3.1 Junior Engineer

<u>Subject</u> <u>Module Code</u>

Junior Engineer 810

3.5.3.2 Deck Engineer

<u>Subject</u> <u>Module Code</u>

Deck Engineer 820

3.5.3.3 Electrician

Subject Module Code

Electrician 830

3.5.3.4 Refrigerating Engineer

Subject Module Code

Refrigerating Engineer 840

#### **3.5.3.5 Machinst**

<u>Subject</u> <u>Module Code</u>

Machinist 850

3.5.3.6 Fireman/Watertender

<u>Subject</u> <u>Module Code</u>

Fireman / Watertender 860

3.5.3.7 Oiler: Steam and Motor

<u>Subject</u> <u>Module Code</u>

Oiler: Steam & Motor 870

3.5.3.8 **Pumpman** 

Subject Module Code

Pumpman 880

3.5.3.9 Oiler (Motor Limited) <sup>1</sup>

<u>Subject</u> <u>Module Code</u>

Oiler: Motor (Limited) 890

3.5.3.10 QMED Renewal Exercise <sup>2</sup>

Subject Module Code

QMED Renewal Exercise 900

- 1 Each applicant for a QMED Oiler endorsement where service has been obtained on motor propelled vessels of less than 1600 GT, (without auxiliary and/or waste heat boilers), should be administered the 890XX, QMED-Oiler Motor (Limited) exam. The endorsement should reflect this limitation.
- 2 The Renewal Module, 900XX, is open book and is to be administered for those applicants holding QMED endorsements who have not maintained a recency of sea service.

## 3.5.4 Examination Structure Sheets: Engine Rating Endorsement

EXAMINATION STRUCTURE SHEET NO. <b>4-1</b>	Endorsement Type - <b>Junior</b> Endorsement Group - <b>Rating</b>		EXAM CODE 81UU
MODULES NUMBER OF QUESTIONS		MINIMUM SCORE	
810, Junior Engineer		70	70

EXAMINATION STRUCTURE SHEET NO. <b>4-2</b>	Endorsement Type - Deck I Endorsement Group - Rating	Engineer gs Endorsement	EXAM CODE <b>82</b> UU
MODULES NUMBER OF QUESTIONS		MINIMUM SCORE	
820, Deck Engineer		70	70

EXAMINATION STRUCTURE SHEET NO. 4-3	Endorsement Type - <b>Electrician</b> Endorsement Group - <b>Ratings Endorsement</b>		EXAM CODE 83UU
MODULES NUMBER OF QUESTIONS		MINIMUM SCORE	
830, Electrician		70	70

EXAMINATION STRUCTURE SHEET NO. 4-4	Endorsement Type - Refrigera Endorsement Group - Ratings E	EXAM CODE <b>84</b> UU	
Me	ODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
840, Refrigerating Engineer		70	70

EXAMINATION STRUCTURE SHEET NO. 4-5	EXAM CODE 85UU		
Mo	ODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
850, Machinist		70	70
EXAMINATION			
STRUCTURE Endorsement Type - Fireman/Watertender SHEET Endorsement Group- NO. 4-6  Endorsement Type - Ratings Endorsement			EXAM CODE <b>86U</b> U
Mo	ODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
860, Fireman Watertende	r	70	70
EXAMINATION STRUCTURE SHEET NO. 4-7  Endorsement Type - Oiler Endorsement Group - Ratings Endorsement			EXAM CODE <b>87</b> UU
Mo	ODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
870, Oiler (Steam and Mo	otor)	70	70
EXAMINATION STRUCTURE SHEET NO. 4-8	Endorsement Type - Pumpma Endorsement Group - Ratings	nn Endorsement	EXAM CODE 88UU
Mo	ODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
880, Pumpman		70	70
EXAMINATION STRUCTURE SHEET NO. <b>4-9</b>	Endorsement Type – <b>Oiler-M</b> Endorsement Group- <b>Ratings</b>		EXAM CODE <b>89UU</b>
Mo	ODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
890, Oiler - Motor (Limi	ted)	70	70

EXAMINATION STRUCTURE SHEET NO. 4-10	Endorsement Type - Renewal Endorsement Group - Ratings Endorsement		EXAM CODE <b>90U</b> U
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
900, Renewal Exercise		70	90

## 4. DECK GUIDE

## 4.1 Deck Exam Module Codes

**Table 4-1 Summary of Examination Modules for Deck** 

SID	CTION ONE – OCEANS OR NEAR COASTAL ROUTE				
	Unlimited Deck Licenses				
<b>Module Code</b>	Module Name				
15XXX	Chief Mate/Master (Management)				
109XX	Chief Mate/Master (Management) - Renewal/Refresher Exercise				
14XXX	Third Mate/Second Mate (OICNW)				
129XX	Third Mate/Second Mate (OICNW) - Renewal/Refresher Exercise				
	Limited Deck Licenses				
<b>Module Code</b>	Module Name				
011X1	Master NMT 1600 GRT – Partial Module				
20XXX	Master NMT 500/1600 GRT				
18XXX	Mate NMT 500/1600 GRT				
129XX	Mate NMT 500/1600 GRT - Renewal/Refresher Exercise				
22XXX	Master or Mate NMT 200 GRT or Master NMT 100 GRT				
011X3	Master/Mate NMT 200 GRT – Partial Module				
011X2	Mate NMT 100 GRT – Partial Module				
39XXX	Operator Uninspected Passenger Vessel				
	Uninspected Fishing Vessel License				
Module Code	Module Name				
37XXX	Master UFIV				
38XXX	Mate UFIV				
	Offshore Supply Vessel Licenses				
<b>Module Code</b>	Module Name				
20XXX	Master or Chief Mate				
18XXX	Mate				
SECTIO	N TWO – GREAT LAKES and INLAND or INLAND ROUTES				
	Unlimited Deck Licenses				
<b>Module Code</b>	Module Name				
23XXX	Master				
24XXX	Mate				
249XX	Master/Mate - Renewal/Refresher Exercise				
	Limited Deck Licenses				
Module Code	Module Name				
25XXX	Master NMT 500/1600 GRT				
26XXX	Mate NMT 500/1600 GRT				
259XX	Master/Mate NMT 500/1600 GRT - Renewal/Refresher Exercise				
27XXX	Master/Mate NMT 200 GRT or Master NMT 100 GRT				
011X4	Master/Mate NMT 200 GRT – Partial Module				
011X2	Mate NMT 100 GRT – Partial Module				
39XXX	Operator Uninspected Passenger Vessel				

SECTION 7	TWO – GREAT LAKES and INLAND or INLAND ROUTES (cont.)
	River Routes
<b>Module Code</b>	Module Name
30XXX	Master AGT NMT 500/1600 GRT
31XXX	Mate NMT 500/1600 GR
309XX	Mate NMT 500/1600 GRT - Renewal/Refresher Exercise
32XXX	Master/Mate NMT 200 GRT or Master NMT 100 GRT
	Towing Vessel Licenses
Module Code	Module Name
34XXX	Master/Mate Pilot/Apprentice Mate Steersman Oceans or Near Coastal
35XXX	Master/Mate Pilot/Apprentice Mate Steersman Great Lakes and Inland
36XXX	Master/Mate Pilot/Apprentice Mate Steersman Western Rivers
	Mobile Offshore Drilling Unit Licenses
Module Code	Module Name
92XXX	Offshore Installation Manager – Unrestricted
93XXX	Offshore Installation Manager – Surface Units on Location
94XXX	Offshore Installation Manager – Surface Units Underway
95XXX	Offshore Installation Manager – Bottom Bearing Units on Location
96XXX	Offshore Installation Manager – Bottom Bearing Units Underway
929XX	Offshore Installation Manager – Renewal/Refresher Exercise
91XXX	Barge Supervisor
90XXX	Ballast Control Officer
	Rules of the Road Modules
Module Code	Module Name
Q100	Rules of the Road: Inland and International
Q301	Rules of the Road: Inland Limited Operator Uninspected Passenger Vessels
Q475	Rules of the Road: Inland and International Renewal Open Book Exercise
Q300	Rules of the Road: Inland
Q476	Rules of the Road: Inland Renewal Open Book Exercise
	Navigation Modules
Module Code	Module Name
072XX	Navigation General – Any Appropriate License
07XXX	Navigation Problems – Any Appropriate License
	First Class Pilot Licenses
<b>Module Code</b>	Module Name
03XXX	First Class Pilot Any Appropriate Tonnage
	Towing/Sailing Endorsements
Module Code	Module Name
017XX	Assistance Towing Endorsement
018XX	Sail Endorsement

SECTION THREE - SUPPORT LEVEL ENDORSEMENTS				
	Able Seaman			
45XXX	Able Seaman – Unlimited/Limited/Special/Fishing Industry			
46XXX	Able Seaman – Offshore Supply Vessel			
43XXX	Able Seaman – Sail			
	Lifeboatman			
48XXX	Lifeboatman			
44XXX	Lifeboatman – Limited			
Tankerman				
970XX	Tankerman Person in Charge/Engineer Dangerous Liquids			
971XX	Tankerman Person in Charge/Engineer Liquefied Gases			
972XX	Tankerman Person in Charge Barge Dangerous Liquids			
973XX	Tankerman Person in Charge Barge Liquefied Gases			
974XX	Tankerman Assistant Dangerous Liquids			
975XX	Tankerman Assistant Liquefied Gases			

#### 4.2 Oceans or Near Coastal Routes

#### 4.2.1 Information

#### 4.2.1.1 Ocean Routes

- IAW 46CFR10.107 the term **Oceans** means the waters seaward of the Boundary Lines as described in 46 CFR part 7. For the purposes of establishing sea service credit, the waters of the Inside Passage between Puget Sound and Cape Spencer, Alaska, are not considered oceans.
- IAW 46CFR11.401(a) Any license or MMC endorsement for service as master or mate on ocean waters qualifies the mariner to serve in the same grade on any waters, subject to the limitations of the endorsement.

#### 4.2.1.2 Near Coastal Routes

- IAW 46CFR10.107 the term **Near Coastal** means ocean waters not more than 200 miles offshore.
- IAW 46CFR11.401 (b) A license or MMC endorsement issued for service as master or mate on near-coastal waters qualifies the mariner to serve in the same grade on near-coastal, Great Lakes, and inland waters, subject to the limitations of the endorsement.
- Information on License Endorsement Requirements

## 4.2.1.3 License Endorsement Requirements (IAW 46CFR11.401)

- (g) In order to obtain a master or mate endorsement with a tonnage limit above 200 gross tons, or an endorsement for 200 gross tons or less with an ocean route, whether an original, raise in grade, or increase in the scope of the endorsement authority to a higher tonnage category, the applicant must successfully complete the following training and examination requirements:
  - (1) Approved firefighting course;
  - (2) Approved radar-observer course; and

- (3) Qualification as an able seaman unlimited or able seaman limited (able seaman special or able seaman offshore supply vessels satisfy the able seaman requirement for endorsements permitting service on vessels of 1,600 gross tons or less).
- (h) Each applicant for a deck officer endorsement, which authorizes service on vessels above 1,600 gross tons on ocean or near-coastal waters, whether original or raise of grade, must pass a practical-signaling examination (flashing light). An applicant who fails in practical signaling, but passes every other part of the examination, may be issued an endorsement with a 1,600 gross ton limitation. The tonnage limitation can be removed upon successful completion of the signaling examination.

# 4.2.2 Examination Structure Sheet Index – Oceans OR Near Coastal License Endorsements

## 4.2.2.1 Any Gross Registered Tons (AGT)

## **Management Level**

Raise in Grade     Chief Mate/Master AGT Oceans or Near Coastal	ESS 1-1
• Increase in Scope	
Master/Chief Mate AGT Near Coastal to Oceans	ESS 1-2
Renewal     Magtan/Chief Mate ACT Occaps and Near Coastel on Near Coastel	ESS 1-3
Master/Chief Mate AGT Oceans and Near Coastal or Near Coastal	<u> </u>
Operational Level	
Original /Raise in Grade	
Third Mate/Second Mate AGT Oceans or Near Coastal	ESS 1-4
• Increase in Scope	
Third Mate/Second Mate AGT Near Coastal to Oceans	ESS 1-5
• Renewal	
Third Mate/Second Mate AGT Oceans or Near Coastal	<b>ESS 1-6</b>

## 4.2.2.2 Limited Tonnage NMT 500/1600 Gross Registered Tons (GRT)

Raise in Grade or Increase in Scope	
Master NMT 500/1600 GRT Oceans or Near Coastal	ESS 1-7
Increase in Scope	
Master NMT 500/1600 GRT Near Coastal to Oceans	ESS 1-8
Renewal	
Master NMT 500/1600 GRT Oceans or Near Coastal	ESS 1-9
Original Issue or Increase in Scope	
Mate NMT 500/1600 GRT Oceans or Near Coastal	ESS 1-10
Increase in Scope	
Mate NMT 500/1600 GRT Near Coastal to Oceans	ESS 1-11
Renewal	
Mate NMT 500/1600 GRT Oceans or Near Coastal	ESS 1-12

## 4.2.2.3 Limited Tonnage NMT 200 Gross Registered Tons (GRT)

•	Original Issue or Raise in Grade	
	Master NMT 200 GRT Oceans or Near Coastal	ESS 1-13
•	Increase in Scope	
	Master NMT 100 GRT Near Coastal to Master NMT 200 GRT Near Coastal	<b>ESS 1-14</b>
	Master NMT 200 GRT Near Coastal to Oceans	ESS 1-15
	Mate/Master NMT 200 GRT Near Coastal (from Inland)	ESS 1-16
•	Renewal	
	Master NMT 200 GRT Oceans or Near Coastal	<b>ESS 1-17</b>
•	Original Issue or Raise in Grade  Mate NMT 200 GRT Near Coastal	ESS 1-18
•	Renewal Moto NMT 200 CRT Near Coastel	ECC 1 10
	Mate NMT 200 GRT Near Coastal	ESS 1-19
•	Original Issue or Raise in Grade	
	Master NMT 100 GRT Near Coastal	ESS 1-20
•	Increase in Scope	
	Master NMT 100 GRT Inland to Near Coastal	<b>ESS 1-21</b>
_	Donoval	
•	Renewal Master NMT 100 GRT Near Coastal	ESS 1-22
		LOO 1-22
•	Original Issue	
	Operator Uninspected Passenger Vessel Near Coastal	ESS 1-23
•	Increase in Scope	
	Operator Uninspected Passenger Vessel Near Coastal (from GL & Inland)	ESS 1-24
	Renewal	
•	Operator Uninspected Passenger Vessel Near Coastal	ESS 1-25
4.2.2.4	Uninspected Fishing Vessels (UFIV) Any Appropriate Tonna	ge
•	Original Issue or Raise in Grade	
	Master UFIV Oceans or Near Coastal	<b>ESS 1-26</b>
_	In average in Coope	
•	Increase in Scope Master UFIV Near Coastal to Oceans	ESS 1-27
		E88 1-21
•	Renewal	
	Master UFIV Oceans or Near Coastal	ESS 1-28
•	Original Issue	
	Mate UFIV Oceans or Near Coastal	ESS 1-29
•	Increase in Scope	
•	Mate UFIV Near Coastal to Oceans	ESS 1-30
		100 I-30
•	Renewal	
	Mate UFIV Oceans or Near Coastal	<b>ESS 1-31</b>

## 4.2.2.5 Offshore Supply Vessels (OSV) Any Appropriate Tonnage

• Raise in Grade	
Master OSV Oceans or Near Coastal	<b>ESS 1-32</b>
Chief Mate OSV Oceans or Near Coastal	ESS 1-32
• Increase in Scope	
Master/Chief Mate OSV Near Coastal to Oceans	ESS 1-33
Original Issue	
Mate OSV Oceans or Near Coastal	ESS 1-34
• Increase in Scope	
Mate OSV Near Coastal to Oceans	ESS 1-35
• Renewal	
Master/Chief Mate/Mate OSV Oceans or Near Coastal	ESS 1-36

# 4.2.3 Examination Structure Sheets – Oceans or Near Coastal License Endorsement

EXAMINATION STRUCTURE SHEET NO. <b>1-1</b>	Tonnage Group- Route- Action-	CHIEF MATE/M ANY GROSS RE OCEANS OR NI RAISE IN GRAI (from Second Ma	EXAM CODE 15BR	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International		50	90	
151XX Deck General: Part A		50	70	
152XX Deck General: Part B		50	70	
153XX Navigation General		70	70	
154XX Deck Safety and Environmental Protection		70	70	
155XX Deck Safety: Stability		15	70	
156XX Navigation Problems: Chart Plot		10	90	
157XX Navigation Problems: Near Coastal		10	90	
158XX Navigation Problems: Oceans		15	80	

<sup>\* &</sup>lt;u>SERVICE REQUIREMENT for CHIEF MATE</u>

46CFR 11.405

46CFR 11.404

Applicants Raising Grade from Chief Mate Oceans or Near Coastal to Master Oceans or Near Coastal may do so without testing if they were originally issued a Chief Mate Oceans or Near Coastal endorsement **after** 1 February 2002. All others must meet the requirements of this ESS.

<sup>\*</sup> SERVICE REQUIREMENT for MASTER

<sup>\*</sup> LICENSING NOTES

Applicants testing for Near Coastal Routes do NOT take Module 158XX

**46CFR 11.401(e):** Applicants holding Master AGT Great Lakes and Inland may increase the scope of their endorsement to a Near Coastal route by completing all modules of this ESS after meeting the training requirements in 46CFR 11.401(g) and ALL Operational and Management level STCW requirements.

**46CFR 11.412 (b):** Applicants who meet all requirements for Chief Mate AGT Oceans or Near Coastal, can add an endorsement for Master NMT 1600 GRT, on the same route, by taking module 011X1-Deck/Navigation General and Deck Safety.

EXAMINATION STRUCTURE SHEET NO. 1-2	Endorsement - Tonnage Group- Route- Action-	CHIEF MATE/ MASTER ANY GROSS REGISTERED TONS (AGT) OCEANS INCREASE IN SCOPE (from Near Coastal)		EXAM CODE 15BC
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
158XX Ocean Navigation Problems		15	80	
150XX Navigation General		20	70	

#### \* SERVICE REQUIREMENT

46CFR 11.401(e)

#### \* LICENSING NOTES

In addition to the examination requirements applicants must show successful completion of the following Control Sheets from NMC Policy Letter 04-02:

Performance Standards for Assessment of Competence, Masters and Chief Mates on Ships of 3000 Gross Tons or More (ITC), STCW Table A-II/2

Latitude by Ex-Meridian (Sun)
Latitude by Meridian Transit (Other than Sun)
Star Identification
Star Selection
LOP from High Altitude Sight
Celestial Navigation Fix
Great Circle Sailing
Mercator Sailing Course and Distance
Mercator Sailing Final Position

EXAMINATION STRUCTURE SHEET NO. 1-3		CHIEF MATE/ MASTER ANY GROSS REGISTERED TONS (AGT) OCEANS OR NEAR COASTAL RENEWAL		EXAM CODE 15RE
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
Q475 Rules of the Road: Inland and International Renewal			50	90
109XX Refresher Exercise			50	90

#### \* SERVICE REQUIREMENT

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. <b>1-4</b>	Endorsement - Tonnage Group- Route- Action-	Tonnage Group- Route-  ANY GROSS REGISTERED TONS (AGT)  OCEANS OR NEAR COASTAL		
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International			50	90
141XX Deck General			70	70
142XX Navigation General			70	70
143XX Deck Safety and Environmental Protection			70	70
144XX Navigation Problems: Chart Plot			15	87
145XX Navigation Problems: Near Coastal			10	90
146XX Navigation Problems: Oceans			15	80

<sup>\*</sup> SERVICE REQUIREMENT for THIRD MATE

46CFR 11.407

46CFR 11.406

#### \* LICENSING NOTES

Applicants Raising Grade from Third Mate to Second Mate may do so without testing if they were originally issued a Third Mate Any Gross Tons Oceans or Near Coastal endorsement **after** 1 February 2002. All others must meet the requirements of this ESS.

Applicants testing for Near Coastal Routes do NOT take Module 146XX

USCG approved OICNW Celestial Navigation Courses **CANNOT** be used in lieu of any of the examinations prescribed above

<sup>\* &</sup>lt;u>SERVICE REQUIREMENT for SECOND MATE</u>

**46CFR 11.401(e):** Applicants holding Mate AGT Great Lakes and Inland may increase the scope of their endorsement to a Near Coastal route completing all modules of this ESS after meeting the training requirements in 46CFR 11.401(g) and ALL Operational STCW requirements.

**46CFR 11.412(b):** Applicants who meet all requirements for Second Mate AGT Oceans or Near Coastal can add an endorsement for Master NMT 1600 GRT, on the same route, by taking module 011X1 Deck/Navigation General and Deck Safety.

EXAMINATION STRUCTURE SHEET NO. 1-5	Tonnage Group- Route- ANY GROSS REGIST OCEANS	onnage Group- oute- ANY GROSS REGISTERED TONS (AGT) OCEANS	
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
146XX Navigation Problems: Oceans		15	80
147XX Navigation General		20	70

#### \* SERVICE REQUIREMENT

46CFR 11.401(e)

#### \* LICENSING NOTES

In addition to the examination requirements applicants must show successful completion of a USCG approved OICNW Celestial Navigation Course however, the course **CANNOT** be used in lieu of the examinations prescribed above

EXAMINATION STRUCTURE SHEET NO. 1-6	Endorsement - Tonnage Group- Route- Action-	THIRD MATE/SECOND MATE - ANY GROSS REGISTERED TONS (AGT) OCEANS or NEAR COASTAL RENEWAL		EXAM CODE 14RE
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal			50	90
129XX Refresher Exercise			50	90

#### \* SERVICE REQUIREMENT

46CFR 10.227

## \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. 1-7	Endorsement - MASTER Tonnage Group-NMT 500/1600 GROSS R Route- OCEANS OR NEAR COA Action- RAISE IN GRADE (from RAISE IN GRADE (from INCREASE IN SCOPE (f	EXAM CODE 20BR	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the	Road: Inland and International	50	90
201XX Deck General		50	70
200XX Navigation General: Near Coastal		50	70
202XX Navigation General: Oceans		50	70
203XX Deck Safety and Environmental Protection		50	70
204XX Navigation Problems: Chart Plot		10	90
205XX Navigation	n Problems: Near Coastal	10	90
206XX Navigation	n Problems: Oceans	15	80

#### \* SERVICE REQUIREMENT for MASTER NMT 500

46CFR 11.418

#### \* LICENSING NOTES

Applicants for Ocean Routes take all of the above modules **EXCEPT** 200XX.

Applicants for Near Coastal routes take all of the above modules EXCEPT 202XX and 206XX.

**46CFR 11.418(b):** Applicants holding an endorsement as Master or Mate Pilot of Towing Vessels Oceans or Near Coastal, regardless of the tonnage, who meet the sea service requirement can raise the grade of their license to Master NMT 500 GRT on the same route, and **ONLY** the following modules are required:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International	50	90
011X1 Deck General	70	70
203XX Deck Safety and Environmental Protection	50	70

#### \* SERVICE REQUIREMENT for MASTER NMT 1600

46CFR 11.412

#### \* LICENSING NOTES

Applicants holding an endorsement as NMT 500 GRT Master Oceans or Near Coastal, originally issued **after** 1 February 2002, may increase the scope of their license to NMT 1600 GRT by presenting evidence of the required sea time. No further testing is required.

**46CFR 11.412(b):** Applicants holding an endorsement as Chief Mate AGT Oceans or Near Coastal originally issued **after** 1 February 2002 do not require testing to add this endorsement.

**46CFR 11.412(b):** Applicants holding an endorsement as Chief Mate AGT Oceans or Near Coastal originally issued **prior** 1 February 2002 must take module 011X1 Deck/Navigation General and Deck Safety.

#### OR

Applicants who meet all requirements for Second Mate AGT Oceans or Near Coastal can add this endorsement by taking module 011X1 Deck/Navigation General and Deck Safety.

EXAMINATION STRUCTURE SHEET NO. 1-8	Endorsement - Tonnage Group- Route- Action-	MASTER - NMT 500/1600 GROSS REGISTERED TONS OCEANS INCREASE IN SCOPE (from NC)		EXAM CODE 20DI
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
206XX Navigation Problems: Oceans		15	80	
207XX Navigation General			20	70

#### \* SERVICE REQUIREMENT

None

#### \* LICENSING NOTES

In addition to the examination requirements applicants must show successful completion of a USCG approved OICNW Celestial Navigation Course. If the course is US Coast Guard approved for such it **may** be presented in lieu of the examinations and/or assessments prescribed above

EXAMINATION STRUCTURE SHEET NO. 1-9	Endorsement - Tonnage Group- Route- Action-	MASTER NMT 500/1600 GROSS REGISTERED TONS OCEANS or NEAR COASTAL RENEWAL		EXAM CODE 20RE
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal			50	90
209XX Refresher Exercise			30	90

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. <b>1-10</b>	Endorsement - MATE Tonnage Group-NMT 500/1600 GROSS I Route- OCEANS OR NEAR CO Action- ORIGINAL ISSUE INCREASE IN SCOPE	EXAM CODE 21RD	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the	Road: Inland and International	50	90
181XX Deck General		70	70
180XX Navigation General: Near Coastal		70	70
182XX Navigation General: Oceans		70	70
183XX Deck Safety and Environmental Protection		70	70
184XX Navigation Problems: Chart Plot		15	87
185XX Navigation Problems: Near Coastal		10	90
186XX Navigation	Problems: Oceans	15	80

<sup>\*</sup> SERVICE REQUIREMENT for Mate NMT 500 Oceans

46CFR 11.421

Applicants holding an endorsement as Mate NMT 500 GRT Oceans or Near Coastal, originally issued **after** 1 February 2002, may increase the scope of their license to NMT 1600 GRT by presenting evidence of the required sea time. No further testing is required.

Applicants for Ocean Routes take all of the above modules **EXCEPT** 180XX.

Applicants for Near Coastal routes take all of the above modules EXCEPT 182XX and 186XX.

\* SERVICE REQUIREMENT for Mate NMT 1600 Oceans

46CFR 11.414

\* SERVICE REQUIREMENT for Mate NMT 1600 Near Coastal

46CFR 11.416

<sup>\*</sup> SERVICE REQUIREMENT for Mate NMT 500 Near Coastal

<sup>\*</sup> LICENSING NOTES

EXAMINATION STRUCTURE SHEET NO. <b>1-11</b>	Endorsement - Tonnage Group- Route- Action-	MATE NMT 500/1600 GROSS REGISTERED TONS OCEANS INCREASE IN SCOPE (from NC)		EXAM CODE 21DI
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
186XX Navigation Problems: Oceans		15	80	
187XX Navigation General		20	70	

46CFR 11.414

#### \* LICENSING NOTES

In addition to the examination requirements applicants must show successful completion of a USCG approved OICNW Celestial Navigation Course. If the course is US Coast Guard approved for such it **may** be presented in lieu of the examinations and/or assessments prescribed above

EXAMINATION STRUCTURE SHEET NO. 1-12	Endorsement - Tonnage Group- Route- Action-	MATE NMT 500/1600 GROS OCEANS OR NEAR O RENEWAL	EXAM CODE 21RE	
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal			50	90
129XX Refresher Exercise		50	90	

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. <b>1-13</b>	Endorsement - MASTER Tonnage Group- NMT 200 GROSS REGIONATE Route- OCEANS OR NEAR COON ORIGINAL ISSUE RAISE IN GRADE (from RAISE IN GRADE (from RAISE IN GRADE)	EXAM CODE 22KR	
	MINIMUM SCORE		
Q100 Rules of the Road: Inland and International 50			90
011X3 Deck General 20			70
072X1 Navigation General 20			70
221XX Deck Safety and Environmental Protection 70			70
073XX Navigation Problems: Chart Plot 20			90
078XX Navigatio	n Problems: Oceans	5	80

<sup>\* &</sup>lt;u>SERVICE REQUIREMENT for Oceans</u>

46CFR 11.426

#### Near Coastal Routes do NOT take Module 078XX

**46CFR11.903(b):** When Raising Grade **from** Mate NMT 200 GRT Near Coastal **to Master NMT 200 GRT Near** Coastal **to Master NMT 200** GRT Near Coastal **to Master NMT 200** GRT Oceans ONLY module **078XX** is required.

When Raising Grade **from** Master or Mate Pilot of Towing Vessels Oceans or Near Coastal to Master NMT 200 GRT on the same route, **ONLY** the following modules are required:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International	50	90
011X3 Deck General	20	70
221XX Deck Safety and Environmental Protection	70	70

<sup>\*</sup> SERVICE REQUIREMENT for Near Coastal

<sup>\*</sup> LICENSING NOTES

EXAMINATION STRUCTURE SHEET NO. <b>1-14</b>	Endorsement - MASTER Tonnage Group- NMT 200 GROSS REG Route- NEAR COASTAL Action- INCREASE IN SCOPE	EXAM CODE 22HO	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the l	Road: Inland and International	50	90
011X3 Deck Gener	al	20	70
073XX Navigation	Problems: Chart Plot	20	90

46CFR 11.426

EXAMINATION STRUCTURE SHEET NO. <b>1-15</b>	Endorsement - Tonnage Group- Route- Action-	MASTER NMT 200 GROSS REGISTERED TONS OCEANS INCREASE IN SCOPE (from NC)		EXAM CODE 22JI
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
078XX Navigation Problems: Oceans		5	80	

# \* <u>SERVICE REQUIREMENT</u>

46CFR 11.424

Applicants who wish to Increase the scope of a Master NMT 100 GRT Near Coastal to Master NMT 200 GRT Oceans must complete the requirements of ESS 1-14 AND 1-15.

EXAMINATION STRUCTURE SHEET NO. <b>1-16</b>	Route- NEAR COASTAL	oup- NMT 200 GROSS REGISTERED TONS		
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE	
Q100 Rules of the Road: Inland and International		50	90	
011X3 Deck Gen	eral	20	70	
221XX Deck Safety and Environmental Protection		70	70	

<sup>\* &</sup>lt;u>SERVICE REQUIREMENT for Master</u>

46CFR 11.426

\* <u>SERVICE REQUIREMENT for Mate</u>

46CFR 11.427

<sup>\*</sup> LICENSING NOTES

EXAMINATION STRUCTURE SHEET NO. 1-17	Endorsement - Tonnage Group- Route- Action-	MASTER NMT 200 GROSS REGISTERED TONS OCEANS OR NEAR COASTAL RENEWAL		EXAM CODE 22RR
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal			50	90
229XX Refresher Exercise			20	90

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. <b>1-18</b>	Endorsement - Tonnage Group- Route- Action-	MATE NMT 200 GROSS RI NEAR COASTAL ORIGINAL ISSUE RAISE IN GRADE (	EXAM CODE 22KR	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International			50	90
011X3 Deck General			20	70
072X1 Navigation General			20	70
221XX Deck Safety and Environmental Protection			70	70
073XX Navigation	Problems: Chart Ple	ot	20	90

#### \* SERVICE REQUIREMENT

46CFR 11.427

#### \* LICENSING NOTES

46 CFR11.427(b): When Raising Grade **from** Operator Uninspected Passenger Vessel Near Coastal **ONLY** the following module is required:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
011X2 Deck General	10	70

#### \*LICENSING NOTES

When raising grade from Master NMT 100 GRT Near Coastal, **ONLY** the following modules are required: 054XX, 011X3, 073XX.

EXAMINATION STRUCTURE SHEET NO. <b>1-19</b>	Endorsement - Tonnage Group- Route- Action-	MATE NMT 200 GROSS RE NEAR COASTAL RENEWAL	EXAM CODE 22RR	
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal			50	90
229XX Refresher Exercise		20	90	

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. 1-20	Endorsement - Tonnage Group- Route- Action-	MASTER NMT 100 GROSS REGISTERED TONS NEAR COASTAL ORIGINAL ISSUE RAISE IN GRADE (from OUPV NC)		EXAM CODE 22HN
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
Q100 Rules of the Road: Inland and International		50	90	
072X1 Navigation General		20	70	
221XX Deck Safety and Environmental Protection		70	70	
077XX Navigation	Problems: Chart Plo	t	10	70

# \* <u>SERVICE REQUIREMENT</u>

46CFR 11.428

# \* <u>LICENSING NOTES</u>

When Raising Grade **from** Operator Uninspected Passenger Vessel Near Coastal **ONLY** the following module is required:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
221XX Deck Safety and Environmental Protection	70	70

EXAMINATION STRUCTURE SHEET NO. 1-21	Endorsement - MASTER Tonnage Group- NMT 100 GROSS REGISTERED TONS Route- NEAR COASTAL Action- INCREASE IN SCOPE (from Great Lakes & Inland or Inland)		EXAM CODE 27DC
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International		50	90
221XX Deck Safety and Environmental Protection		70	70

46CFR 11.428

EXAMINATION STRUCTURE SHEET NO. 1-22	Endorsement - Tonnage Group- Route- Action-	MASTER NMT 100 GROSS REGISTERED TONS NEAR COASTAL RENEWAL		EXAM CODE 22RR
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal			50	90
229XX Refresher Exercise			20	90

# \* SERVICE REQUIREMENT

46CFR 10.227

# \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. <b>1-23</b>	Endorsement - Tonnage Group- Route- Action-	OPERATOR UNINSPECTED PASSENGER VESSEL NEAR COASTAL ORIGINAL ISSUE		EXAM CODE 39AA
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International		50	90	
072X1 Navigation General		20	70	
391XX Deck Safety and Environmental Protection		60	70	
077XX Navigation	Problems: Chart Pl	ot	10	70

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 11.467

#### \* LICENSING NOTES

An OUPV Near Coastal endorsement will be limited to waters 100 nm offshore.

EXAMINATION STRUCTURE SHEET NO. 1-24	Endorsement - Tonnage Group- Route- Action-	OPERATOR UNINSPECTED PASSENGER VESSEL GREAT LAKES AND INLAND OR INLAND INCREASE IN SCOPE (to Near Coastal)		EXAM CODE 39AD
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
Q100 Rules of the Road: Inland and International		50	90	

46CFR 11.467

EXAMINATION STRUCTURE SHEET NO. <b>1-25</b>	Endorsement - Tonnage Group- Route- Action-	OPERATOR UNINSPECTED PASSENGER VESSEL NEAR COASTAL RENEWAL		EXAM CODE <b>39RE</b>
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal			50	90
399XX Refresher Exercise			20	90

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety day

EXAMINATION STRUCTURE SHEET NO. <b>1-26</b>	Endorsement - Tonnage Group- Route- Action-	MASTER UNINSPECTED FISHING VESSEL ANY APPROPRIATE TONNAGE OCEANS OR NEAR COASTAL ORIGINAL RAISE IN GRADE (from Mate UFIV O or NC)		EXAM CODE 37AA
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the	Q100 Rules of the Road: Inland and International		50	90
072X1 Navigation General		20	70	
371XX Deck Safety and Environmental Protection		50	70	
073XX Navigation Problems: Chart Plot		20	90	
374XX Navigation	n Problems: Oceans		10	90

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 11.462

# \* <u>LICENSING NOTES</u>:

See **46CFR 11.462** for calculation of Tonnage Limitation Applicants for Near Coastal routes take all of the above modules **EXCEPT** 374XX.

EXAMINATION STRUCTURE SHEET NO. 1-27		MASTER UNINSPECTED FISHING VESSEL ANY APPROPRIATE TONNAGE OCEANS INCREASE IN SCOPE (from NC)		EXAM CODE 37AC
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
374XX Navigation Problems: Oceans		10	90	

None

EXAMINATION STRUCTURE SHEET NO. 1-28	Tonnage Group- Route- <b>ANY</b> A <b>OCE</b>	MASTER UNINSPECTED FISHING VESSEL ANY APPROPRIATE TONNAGE OCEANS OR NEAR COASTAL RENEWAL		EXAM CODE 37RE
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal		50	90	
379XX Refresher Exercise			30	90

# \* SERVICE REQUIREMENT

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. <b>1-29</b>	Endorsement - Tonnage Group- Route- Action-	MATE UNINSPECTED FISHING VESSEL ANY APPROPRIATE TONNAGE OCEANS OR NEAR COASTAL ORIGINAL		EXAM CODE 38AD
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International		50	90	
072X1 Navigation General: Near Coastal		20	70	
381XX Deck Safety and Environmental Protection		60	70	
073XX Navigation Problems: Chart Plot		20	90	
078XX Navigation	n Problems: Oceans		5	80

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 11.462

#### \* <u>LICENSING NOTES</u>:

See 46CFR11.462 for calculation of Tonnage Limitation

Applicants for Near Coastal routes take all of the above modules **EXCEPT** 078XX.

EXAMINATION STRUCTURE SHEET NO. 1-30		MATE UNINSPECTED FISHING VESSEL ANY APPROPRIATE TONNAGE OCEANS INCREASE IN SCOPE (from NC)		EXAM CODE 37AF
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
078XX Navigation Problems: Oceans		5	80	

None

EXAMINATION STRUCTURE SHEET NO. 1-31		MATE UNINSPECTE ANY APPROPRIATE OCEANS OR NEAR RENEWAL	EXAM CODE 38RE	
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal			50	90
389XX Refresher Exercise			50	90

# \* SERVICE REQUIREMENT

46CFR 10.227

Exams are required only if applicant does not have the required sea service for renewal or does not have closely related shore side experience or has not taken an approved refresher course.

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. 1-32	Tonnage Group- Route- ANY APPROPRIAT OCEANS OR NEAR	Tonnage Group- Route- ANY APPROPRIATE TONNAGE OCEANS OR NEAR COASTAL		
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE	
Q100 Rules of the	Road: Inland and International	50	90	
201XX Deck Gene	ral	50	70	
200XX Navigation	General: Near Coastal	50	70	
202XX Navigation	General: Oceans	50	70	
203XX Deck Safety and Environmental Protection		50	70	
204XX Navigation Problems: Chart Plot		10	90	
205XX Navigation Problems: Near Coastal		10	90	
206XX Navigation	Problems: Oceans	15	80	

#### \* <u>SERVICE REQUIREMENT for Chief Mate</u>

46CFR 11.495

STCW Regulation II/2

# \* SERVICE REQUIREMENT for Master

46CFR 11.493

STCW Regulation II/2

# \* LICENSING NOTES

Tonnage TBD

Domestic/International TBD

Applicants for Ocean Routes take all of the above modules EXCEPT 200XX.

Applicants for Near Coastal routes take all of the above modules EXCEPT 202XX and 206XX

EXAMINATION STRUCTURE SHEET NO. 1-33	Endorsement - Tonnage Group- Route- Action-	t - MASTER or CHIEF MATE OSV  oup- ANY APPROPRIATE TONNAGE  OCEANS  INCREASE IN SCOPE (from NC)		EXAM CODE <b>20DI</b>
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
206XX Navigation Problems: Oceans		15	80	
207XX Navigation General		20	70	

#### \* <u>SERVICE REQUIREMENT</u>

None

EXAMINATION STRUCTURE SHEET NO. 1-34	Endorsement - Tonnage Group- Route- Action-	MATE OSV ANY APPROPRIATE TONNAGE OCEANS OR NEAR COASTAL ORIGINAL		EXAM CODE 21DR
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the	Road: Inland and	International	50	90
181XX Deck General			70	70
180XX Navigation General: Near Coastal			70	70
182XX Navigation General: Oceans			70	70
183XX Deck Safety and Environmental Protection			70	70
184XX Navigation Problems: Chart Plot		15	87	
185XX Navigation Problems: Near Coastal		10	90	
186XX Navigation	n Problems: Ocean	ns .	15	80

46CFR 11.497

STCW Regulation II/2

# \* LICENSING NOTES

Tonnage TBD

Domestic/International TBD

Applicants for Ocean Routes take all of the above modules EXCEPT 180XX.

Applicants for Near Coastal routes take all of the above modules **EXCEPT** 182XX and 186XX.

EXAMINATION STRUCTURE SHEET NO. <b>1-35</b>	Endorsement - Tonnage Group- Route- Action-	Fonnage Group- ANY APPROPRIATE TONNAGE Route- OCEANS		EXAM CODE 21DI
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
186XX Navigation Problems: Oceans		15	80	
187XX Navigation General		20	70	

# \* SERVICE REQUIREMENT

None

EXAMINATION STRUCTURE SHEET NO. <b>1-36</b>		MATE /CHIEF MAT ANY APPROPRIATE OCEANS OR NEAR O RENEWAL	EXAM CODE 20RE	
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q475 Rules of the Road: Inland and International Renewal			50	90
209XX Refresher Exercise			30	90

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. 1-37	Endorsement - Tonnage Group- Route- Action-	AUXILLIARY SAIL ANY APPROPRIAT OCEANS OR NEAR ENDORSEMENT		EXAM CODE 018A
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
018XX Deck Safety and Rules of the Road		20	70	

#### \* <u>SERVICE REQUIREMENT</u>

Masters/Mates endorsements for service on vessels of not more than 200 gross tons	46CFR 11.401(f)
Master NMT 200GRT Oceans and Near Coastal	46CFR 11.424(b)
Master NMT 200GRT Near Coastal	46CFR 11.426(b)
Master NMT 100GRT Near Coastal	46CFR 11.428(b)
Mate NMT 200GRT Near Coastal	46CFR 11.427(c)

EXAMINATION STRUCTURE SHEET NO. <b>1-38</b>	Endorsement - Tonnage Group- Route- Action-	ASSISTANCE TOWING MASTER OR MATE 200 GROSS REGISTERED TONS OR LESS OCEANS OR NEAR COASTAL ENDORSEMENT		EXAM CODE <b>017A</b>
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
017XX Deck Gener	ral		20	70

# \* SERVICE REQUIREMENT

46CFR 11.482

Specific time is not required

#### \* LICENSING NOTES

This is an additional endorsement that can be added to an existing officer endorsement. Assistance Towing endorsements are not independently issued.

#### 4.3 Great Lakes and Inland or Inland Routes

#### 4.3.1 Information

#### 4.3.1.1 Great Lakes and Inland Routes

- IAW 46CFR10.107 the term Great Lakes means the Great Lakes and their connecting and tributary waters including the Calumet River as far as the Thomas J. O'Brien Lock and Controlling Works (between mile 326 and 327), the Chicago River as far as the east side of the Ashland Avenue Bridge (between mile 321 and 322), and the Saint Lawrence River as far east as the lower exit of Saint Lambert Lock. For purposes of requiring merchant mariner credentials with rating endorsements, the connecting and tributary waters are not part of the Great Lakes.
- IAW 46CFR11.430 Any license or MMC endorsement issued for service on the Great Lakes and inland waters is valid on all of the inland waters of the United States as defined in this part.
  - Great Lakes waters include Inland waters.
  - MMC's endorsed for the Great Lakes read: "Great Lakes and Inland Waters"

# 4.3.1.2 Inland Routes

- IAW 46CFR10.107 the term Inland means the navigable waters of the United States shoreward of the Boundary Lines as described in part 7 of this chapter, excluding the Great Lakes, and, for towing vessels, excluding the Western Rivers. For establishing credit for sea service, the waters of the Inside Passage between Puget Sound and Cape Spencer, Alaska, are inland waters.
- IAW 46CFR11.430 Any license or MMC endorsement issued for service on inland waters is valid for the inland waters of the United States, excluding the Great Lakes. Licenses and MMC endorsements with either a Great Lakes and inland or an inland route are valid for service on the sheltered waters of the Inside Passage between Puget Sound and Cape Spencer, Alaska. As these licenses and MMC endorsements authorize service on waters seaward of the International Regulations for Preventing Collisions at Sea (COLREGS) demarcation line as defined in 33 CFR Part 80, the applicant must complete an examination on the COLREGS or the endorsement must exclude such waters.
  - Applicants requesting Great Lakes and Inland or Inland officer endorsements are required to complete a Rules of the Road Q300 module covering Inland Rules of the Road. A geographic COLREGS limitation will be endorsed on the applicants MMC upon successful completion of this module.
  - If the applicant wishes to remove the geographic COLREGS limitation they are required to complete a Rules of the Road module, Q100, covering Inland and International Rules of the Road in lieu of the Q300 module.

# 4.3.2 Examination Structure Sheet Index – Great Lakes and Inland OR Inland License Endorsements

# 4.3.2.1 Any Gross Registered Tons (AGT)

Raise in Grade	Egg 4.1
Master AGT Great Lakes and Inland or Inland	ESS 2-1
• Increase in Scope  Master AGT Inland to Great Lakes and Inland	ESS 2-2
Original     Mate AGT Great Lakes and Inland	ESS 2-3
Renewal     Master/Mate AGT Great Lakes and Inland	ESS 2-4
4.3.2.2 Limited Tonnage NMT 500-1600 Gross Registered Tons	
• Raise in Grade  Master NMT 500/1600 GRT Great Lakes and Inland	ESS 2-5
Original     Mate NMT 500/1600 GRT Great Lakes and Inland	ESS 2-6
Renewal     Master/Mate NMT 500/1600 GRT Great Lakes and Inland	ESS 2-7
4.3.2.3 Limited Tonnage NMT 200 Gross Registered Tons (GRT)	
Raise in Grade or Increase in Scope     Master NMT 200 GRT Great Lakes and Inland or Inland	ESS 2-8
Original Issue or Raise in Grade     Mate NMT 200 GRT Great Lakes and Inland or Inland	ESS 2-9
Original Issue     Master NMT 100 GRT Great Lakes and Inland or Inland	ESS 2-10
Renewal     Mate/Master NMT 200 GRT Great Lakes and Inland or Inland	ESS 2-11
Master NMT 100 GRT Great Lakes and Inland or Inland	ESS 2-11
Original Issue	
Operator Uninspected Passenger Vessel Great Lakes and Inland or Inland Operator Uninspected Passenger Vessel Restricted	ESS 2-13 ESS 2-13
• Renewal Operator Uninspected Passenger Vessel Great Lakes and Inland or Inland	ESS 2-14

# 4.3.2.4 Additional Endorsements Any Appropriate Tonnage

Master or Mate Auxiliary Sail Great Lakes and Inland or Inland
 Master or Mate Assistance Towing Great Lakes and Inland or Inland
 ESS 2-15

# 4.3.3 Examination Structure Sheets – Great Lakes and Inland or Inland License Endorsements

EXAMINATION STRUCTURE SHEET NO. 2-1	Tonnage Group-Route-Action-	·	INLAND OR INLAND om MATE AGT GL & I)	EXAM CODE 23AR
	MODULES	·	NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland			50	90
231XX Deck General			70	70
072X1 Navigation General			20	70
235XX Deck Safety and Environmental Protection			50	70
073XX Navigation Problems: Chart Plot			20	90
237XX Great Lake	es Topics		25	70

<sup>\*</sup> SERVICE REQUIREMENT for Great Lakes & Inland

46CFR 11.433

46CFR 11.435

Applicants for Master AGT Inland do NOT take module 237XX Great Lakes Topics.

<sup>\* &</sup>lt;u>SERVICE REQUIREMENT for Inland</u>

<sup>\*</sup> LICENSING NOTES

EXAMINATION STRUCTURE SHEET NO. 2-2	Route- GREAT	S REGISTERED TONS (AGT) KES AND INLAND IN SCOPE (from I)	EXAM CODE 23AI
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International		50	90
237XX Great Lakes Topics		25	70

46CFR 11.433

#### \* LICENSING NOTES

Applicants take Q100 Rules of the Road: Inland and International if they wish to remove a COLREGS limitation on their endorsement. Otherwise a Rules of the Road module is not required.

EXAMINATION STRUCTURE SHEET NO. 2-3	Endorsement - Tonnage Group- Route- Action-	MATE ANY GROSS REGIST GREAT LAKES AND ORIGINAL ISSUE	EXAM CODE 24AR	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland			50	90
241XX Deck General			70	70
072X1 Navigation General			20	70
245XX Deck Safety and Environmental Protection			50	70
073XX Navigation Problems: Chart Plot			20	90
247XX Great Lake	s Topics		25	70

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 11.437

# \* LICENSING NOTES

EXAMINATION STRUCTURE SHEET NO. 2-4	Tonnage Group- ANY G	LAKES AND	EXAM CODE 23RE	
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q476 Rules of the Road: Inland Renewal Open Book Exercise			50	90
249XX Refresher Exercise			40	90

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

Applicants with a COLREGS limitation on their endorsement take module Q476 Rules of the Road: Inland Renewal Open Book Exercise. If they do not have a COLREGS limitation on their endorsement they take module Q475 Rules of the Road: Inland and International Renewal Open Book Exercise.

EXAMINATION STRUCTURE SHEET NO. 2-5	Endorsement - MASTER Tonnage Group-NMT 500/1600 GROSS I Route- GREAT LAKES AND IN Action- RAISE IN GRADE (From RAISE IN GRADE (From RAISE IN GRADE)	EXAM CODE 25AR	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the	Road: Inland	50	90
072X1 Navigation	General	20	70
251XX Deck Gene and Enviro	eral, Deck Safety onmental Protection	60	70
073XX Navigation	n Problems: Chart Plot	20	90
257XX Great Lake	es Topics	25	70

<sup>\*</sup> SERVICE REQUIREMENT for NMT 500

46CFR 11.446

46CFR 11.442

#### \* LICENSING NOTES

Applicants Raising Grade from Master of Towing Vessels take all modules EXCEPT 072X1

<sup>\*</sup> SERVICE REQUIREMENT for NMT 1600

EXAMINATION STRUCTURE SHEET NO. 2-6	Endorsement - Tonnage Group- Route- Action-	MATE NMT 500/1600 GROSS REGISTERED TONS GREAT LAKES AND INLAND ORIGINAL ISSUE		EXAM CODE 26AR
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland		50	90	
072X1 Navigation General		20	70	
261XX Deck General, Deck Safety and Environmental Protection		60	70	
073XX Navigation Problems: Chart Plot			20	90
267XX Great Lake	s Topics		25	70

<sup>\*</sup> SERVICE REQUIREMENT for NMT 500

\* SERVICE REQUIREMENT for NMT 1600

46CFR 11.444

Applicants requesting Great Lakes and Inland or Inland officer endorsements are required to complete a Rules of the Road Q300 module covering Inland Rules of the Road. A geographic COLREGS limitation will be endorsed on the applicants MMC upon successful completion of this module. If the applicant wishes to remove the geographic COLREGS limitation they are required to complete a Rules of the Road module, Q100, covering Inland and International Rules of the Road in lieu of the Q300 module.

EXAMINATION STRUCTURE SHEET NO. 2-7	Endorsement - Tonnage Group- Route- Action-	MASTER/MATE NMT 500/1600 GROS GREAT LAKES AND RENEWAL	EXAM CODE 25RE	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q476 Rules of the R	oad: Inland Renew	al Open Book Exercise	50	90
259XX Refresher Exercise			40	90

#### \* SERVICE REQUIREMENT

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

Applicants with a COLREGS limitation on their endorsement take module Q476 Rules of the Road: Inland Renewal Open Book Exercise. If they do not have a COLREGS limitation on their endorsement they take module Q475 Rules of the Road: Inland and International Renewal Open Book Exercise.

<sup>\*</sup> LICENSING NOTES

EXAMINATION STRUCTURE SHEET NO. 2-8	Endorsement- MASTER Tonnage Group- NMT 200 GROSS REGIS Route- GREAT LAKES AND INI Action- ORIGINAL ISSUE RAISE IN GRADE (from INCREASE IN SCOPE (from	EXAM CODE 27AB	
	MINIMUM SCORE		
Q300 Rules of the	e Road: Inland	50	90
011X4 Deck General		20	70
072X1 Navigation	n General	20	70
271XX Deck Safety and Environmental Protection		60	70
073XX Navigatio	on Problems: Chart Plot	20	90

<sup>\*</sup> SERVICE REQUIREMENT for Great Lakes & Inland

\* SERVICE REQUIREMENT for Inland

46CFR 11.452

\* LICENSING NOTES

46CFR 11.903(b)3

Applicants Raising Grade from Mate NMT 200 GRT Great lakes and Inland do not require testing if they have the required sea service

When raising grade from Master NMT 100 GRT Great Lakes and Inland or Inland **ONLY** the following modules are required: Q300, 011X4, 073XX.

EXAMINATION STRUCTURE SHEET NO. <b>2-9</b>	Endorsement - Tonnage Group- Route- Action-	MATE NMT 200 GROSS RI GREAT LAKES ANI ORIGINAL ISSUE RAISE IN GRADE (1 RAISE IN GRADE (1	EXAM CODE 27AB	
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland		50	90	
011X4 Deck General		20	70	
072X1 Navigation General		20	70	
271XX Deck Safety and Environmental Protection		60	70	
073XX Navigation	Problems: Chart Ple	ot	20	90

<sup>\*</sup> SERVICE REQUIREMENT for Great Lakes & Inland

\* SERVICE REQUIREMENT for Inland

46CFR 11.454

#### \* LICENSING NOTES

Applicants requesting Great Lakes and Inland or Inland officer endorsements are required to complete a Rules of the Road Q300 module covering Inland Rules of the Road. A geographic COLREGS limitation will be endorsed on the applicants MMC upon successful completion of this module. If the applicant wishes to remove the geographic COLREGS limitation they are required to complete a Rules of the Road module, Q100, covering Inland and International Rules of the Road in lieu of the Q300 module.

When raising grade from Master NMT 100 GRT Great Lakes and Inland or Inland **ONLY** the following modules are required: Q300, 011X4, 073XX.

46 CFR 11.454(d): When Raising Grade **from** Operator Uninspected Passenger Vessels Great Lakes and Inland or Inland **ONLY** the following module is required:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
011X2 Deck General	10	70

EXAMINATION STRUCTURE SHEET NO. <b>2-10</b>	Endorsement - Tonnage Group- Route- Action-	ORIGINAL ISSUE	EGISTERED TONS D INLAND OR INLAND From OUPV GL & I or I)	EXAM CODE 27CA
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland		50	90	
072X1 Navigation General		20	70	
271XX Deck General, Deck Safety and Environmental Protection		60	70	
077XX Navigation Problems: Chart Plot		10	70	

<sup>\*</sup> SERVICE REQUIREMENT for Great Lakes and Inland

46CFR 11.457

When Raising Grade **from** Operator Uninspected Passenger Vessel Great Lakes and Inland or Inland **ONLY** the following module is required:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
271XX Deck Safety and Environmental Protection	60	70

#### \* LICENSING NOTES

Applicants requesting Great Lakes and Inland or Inland officer endorsements are required to complete a Rules of the RoadQ300 module covering Inland Rules of the Road. A geographic COLREGS limitation will be endorsed on the applicants MMC upon successful completion of this module. If the applicant wishes to remove the geographic COLREGS limitation they are required to complete a Rules of the Road module, Q100, covering Inland and International Rules of the Road in lieu of the Q300 module.

EXAMINATION STRUCTURE SHEET NO. <b>2-11</b>	Endorsement - MATE /MASTER NMT 2 Tonnage Group-MASTER NMT 100 GRO Route- GREAT LAKES AND IN Action- RENEWAL	EXAM CODE 27RE	
MODULES NUMBER OF QUEST			MINIMUM SCORE
Q476 Rules of the	Road: Inland Renewal Open Book Exercise	50	90
279XX Refresher	Exercise	20	90

# \* <u>SERVICE REQUIREMENT</u>

\* LICENSING NOTES

46CFR 10.227\*

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

Applicants with a COLREGS limitation on their endorsement take module Q476 Rules of the Road: Inland Renewal Open Book Exercise. If they do not have a COLREGS limitation on their endorsement they take module Q475 Rules of the Road: Inland and International Renewal Open Book Exercise.

<sup>\*</sup> SERVICE REQUIREMENT for Inland

<sup>\*</sup> LICENSING NOTES

EXAMINATION STRUCTURE SHEET NO. 2-12	Endorsement - Tonnage Group- Route- Action-	OPERATOR UNINSPECTED PAS GREAT LAKES ANI ORIGINAL ISSUE	EXAM CODE 39AB	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland		50	90	
072X1 Navigation General			20	70
391XX Deck Safety and Environmental Protection			60	70
077XX Navigation Problems: Chart Plot			10	70

#### \* SERVICE REQUIREMENT for Great lakes & Inland

46CFR 11.467

#### \* SERVICE REQUIREMENT for Inland

46CFR 11.467

Applicants requesting Great Lakes and Inland or Inland officer endorsements are required to complete a Rules of the Road Q300 module covering Inland Rules of the Road. A geographic COLREGS limitation will be endorsed on the applicants MMC upon successful completion of this module. If the applicant wishes to remove the geographic COLREGS limitation they are required to complete a Rules of the Road module, Q100, covering Inland and International Rules of the Road in lieu of the Q300 module.

EXAMINATION STRUCTURE SHEET NO. 2-13	Endorsement - Tonnage Group- Route- Action-	OPERATOR UNINSPECTED PASSENGER VESSEL RESTRICTED ORIGINAL		EXAM CODE <b>39AE</b>
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q301 Rules of the Road:			30	80
071XX Navigation General			10	70
390XX Deck General, Safety & Environmental Protection			40	70

#### \* LICENSING NOTES

See Coast Guard Policy Letter 10-04: Restricted Endorsements for Merchant Mariner Credentials (MMC) as Operator Of Uninspected Passenger Vessels (OUPV) for additional information on this endorsement.

EXAMINATION STRUCTURE SHEET NO. <b>2-14</b>		Group-UNINSPECTED PASSENGER VESSEL GREAT LAKES & INLAND or INLAND or RESTRICTED		
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE	
Q477 Rules of the	Road: Inland Renewal Open Book Exercise	50	90	
399XX Refresher	Exercise	20	90	

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

Applicants with a COLREGS limitation on their endorsement take module Q476 Rules of the Road: Inland Renewal Open Book Exercise. If they do not have a COLREGS limitation on their endorsement they take module Q475 Rules of the Road: Inland and International Renewal Open Book Exercise.

EXAMINATION STRUCTURE SHEET NO. <b>2-15</b>	Endorsement - Tonnage Group- Route- Action-	AUXILLIARY SAIL ANY APPROPRIATI GREAT LAKES ANI ENDORSEMENT	EXAM CODE <b>018A</b>	
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
018XX Deck Safety and Rules of the Road			20	70

#### \* SERVICE REQUIREMENT

Masters and Mates with endorsements for vessels 200 GRT and under as follows:

Master NMT 200GRT Great Lakes and Inland or Inland	46CFR 11.452(b)
Master NMT 100GRT Great Lakes and Inland	46CFR 11.455(b)
Master NMT 100GRT Inland	46CFR 11.457(b)
Mate NMT 200GRT Great Lakes and Inland	46CFR 11.454(b)

EXAMINATION STRUCTURE SHEET NO. <b>2-16</b>	Endorsement - Tonnage Group- Route- Action-	ASSISTANCE TOWING MASTER OR MATE 200 GROSS REGISTERED TONS OR LESS GREAT LAKES AND INLAND OR INLAND ENDORSEMENT		EXAM CODE <b>017A</b>
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
017XX Deck General			20	70

#### \* SERVICE REQUIREMENT

46CFR 11.482

Specific time is not required

#### \* LICENSING NOTES

This is an additional endorsement that can be added to an existing officer endorsement. Assistance Towing endorsements are not independently issued.

#### 4.4 River Routes

#### 4.4.1 Information

#### 4.4.1.1 River Routes

• IAW 46CFR10.107 the term RIVERS means a river, canal, or other similar body of water designated as such by the Coast Guard.

#### 4.4.1.2 Western Rivers Routes

• IAW 46CFR10.107 the term Western Rivers means the Mississippi River, its tributaries, South Pass, and Southwest Pass, to the navigational demarcation lines dividing the high seas from harbors, rivers, and other inland waters of the United States, and the Port Allen-Morgan City Alternate Route, and that part of the Atchafalaya River above its junction with the Port Allen-Morgan City Alternate Route including the Old River and the Red River, and those waters specified in 33 CFR 89.25.

From the COMDTINST M16000.8B Marine Safety Manual Volume Three Page 10-6/7

#### F. River Licenses.

The 46 CFR Part 10 final rule on licensing of maritime personnel created several river licenses. This section supplements the basic structure which the regulations contain on these licenses.

#### 1. Routes.

River licenses can be issued with three route designations; Western Rivers, Rivers other than Western Rivers, and Rivers.

#### 2. License Examinations.

There are three different examinations for rivers licenses; 1) Master's license authorizing service on vessels of more than 200 gross tons, including 500, 1600, and any gross tons; 2) Mate's license authorizing service on vessels of more than 200 gross tons, and; 3) Master or Mate on vessels of not more than 200 gross tons. Tonnage should be determined using the qualifying service.

- a. All three examinations will utilize the 30 question Rules of the Road module. Because Alaskan and other rivers are governed by the COLREGS, applicants for a Rivers route or a Rivers other than a Western Rivers route who are examined with the Inland Rules of the Road module will have the standard COLREGS exclusion placed on their license.
- b. Master and Mate examinations will each have a General module appropriate for the level. All other modules utilized will be existing or new generic modules.
- c. Routes will be determined by which generic navigation modules are taken. Applicants for a Western Rivers route will take the Western Rivers navigation problems module. Applicants for a Rivers other than Western Rivers route will take the navigation problems module based on the Columbia River which is similar in scope to the Western Rivers module. Applicants for a Rivers route will be required to take both navigation modules.

# 4.4.2 Examination Structure Sheet Index – River License Endorsements

# 4.4.2.1 Any Appropriate Tonnage

• Original Issue

Master AGT or NMT 500 or NMT 1600 GRT Rivers	<b>ESS 3-1</b>
Mate NMT 500 or NMT 1600 GRT River	ESS 3-2

Renewal

Master AGT or Master/Mate AGT or NMT 500 or NMT 1600 GRT Rivers ESS 3-3

## 4.4.2.2 Limited Tonnage NMT 200 Gross Registered Tons (GRT)

• Original Issue or Raise in Grade

Master/Mate NMT 200 GRT Rivers ESS 3-4

• Renewal

Master/Mate NMT 200 GRT Rivers ESS 3-5

# 4.4.2.3 Additional Endorsements Any Appropriate Tonnage (AAT)

• Master/Mate Auxiliary Sail Rivers ESS 3-6

• Master/Mate Assistance Towing Rivers ESS 3-7

#### 4.4.3 Examination Structure Sheets – River License Endorsements

EXAMINATION STRUCTURE SHEET NO. <b>3-1</b>	Endorsement - Tonnage Group- Route- Action-	MASTER AGT OR NMT 500/1600 GRT RIVERS ORIGINAL ISSUE		EXAM CODE 30BB
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland			50	90
301XX Deck General, Deck Safety and Environmental Protection			70	70
072X3 Navigation General			15	70
074XX Navigation Problems: Chart Plot			10	90
072X4 Navigation General			15	70
075XX Navigation	Problems: Chart Plo	ot	10	90

\* SERVICE REQUIREMENT for AGT

46CFR 11.435/46CFR 11.459

\* SERVICE REQUIREMENT for NMT 1600 GRT

46CFR 11.442/46CFR 11.459

\* SERVICE REQUIREMENT for NMT 500 GRT

46CFR 11.446/46CFR 11.459

#### \* LICENSING NOTES

River Routes take all the above modules

River Routes Restricted to Rivers other Than Western Rivers Do NOT take 072X4 or 075XX

#### River Routes Restricted to Western Rivers Do NOT take 072X3 or 074XX

EXAMINATION STRUCTURE SHEET NO. 3-2	Endorsement - Tonnage Group- Route- Action-	MATE NMT 500/1600 GRT RIVERS ORIGINAL ISSUE		EXAM CODE 31BB
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland		50	90	
311XX Deck General, Deck Safety and Environmental Protection			60	70
072X3 Navigation General		15	70	
074XX Navigation Problems: Chart Plot			10	90
072X4 Navigation General			15	70
075XX Navigation Problems: Chart Plot		ot	10	90

<sup>\*</sup> SERVICE REQUIREMENT for NMT 500 GRT

46CFR 11.448/46CFR 11.459

\* SERVICE REQUIREMENT for NMT 1600 GRT

46CFR 11.444/46CFR 11.459

#### \* LICENSING NOTES

River Routes take all the above modules

River Routes Restricted to Rivers other Than Western Rivers Do NOT take 072X4 or 075XX

River Routes Restricted to Western Rivers Do NOT take 072X3 or 074XX

EXAMINATION STRUCTURE SHEET NO. 3-3	Endorsement - MASTER OR MATTONNAGE Group-Route- RIVERS RENEWAL	ANY APPROPRIATE TONNAGE RIVERS		
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE	
Q476 Rules of the R	oad: Inland Renewal Open Book Exercise	50	90	
309XX Refresher F	Exercise	30	90	

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. <b>3-4</b>	Endorsement - Tonnage Group- Route- Action-	MASTER OR MATE NMT 200 GROSS REGISTERED TONS RIVERS ORIGINAL ISSUE OR RAISE IN GRADE (from Mate 200 GRT Rivers)		EXAM CODE 32AB
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland			50	90
321XX Deck General, Deck Safety and Environmental Protection			70	70
072X3 Navigation General			15	70
074XX Navigation Problems: Chart Plot			10	90
072X4 Navigation General			15	70
075XX Navigation Problems: Chart Plot			10	90

<sup>\*</sup> SERVICE REQUIREMENT for MASTER

46CFR 11.452/46CFR 11.459

\* SERVICE REQUIREMENT for MATE

46CFR 11.454/46CFR 11.459

#### \* LICENSING NOTES

46CFR 11.903(b)3

Applicants raising the grade of their license from Mate 200 GRT on the same route may do so by presenting the required sea service, no examination is required

River Routes take all the above modules

River Routes Restricted to Rivers other Than Western Rivers Do NOT take 072X4 or 075XX

River Routes Restricted to Western Rivers Do NOT take 072X3 or 074XX

EXAMINATION STRUCTURE SHEET NO. 3-5		MASTER OR MATE NMT 200 GROSS REGISTERED TONS RIVERS RENEWAL		EXAM CODE 32RE
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
Q476 Rules of the Road: Inland Renewal Open Book Exercise			50	90
329XX Refresher Exercise			30	90

#### \* SERVICE REQUIREMENT

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. <b>3-6</b>	Endorsement - Tonnage Group- Route- Action-	AUXILLIARY SAIL MASTER OR MATE ANY APPROPRIATE TONNAGE RIVERS ENDORSEMENT		EXAM CODE 018A
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
018XX Deck Safety and Rules of the Road			20	70

Masters and Mates with endorsements for vessels 200 GRT and under as follows:

 Master NMT 200GRT
 46CFR 11.452(b)

 Mate NMT 200GRT
 46CFR 11.454(b)

EXAMINATION STRUCTURE SHEET NO. 3-7	Endorsement - Tonnage Group- Route- Action-	ASSISTANCE TOWING MASTER OR MATE 200 GROSS REGISTERED TONS OR LESS ANY ENDORSEMENT		EXAM CODE 017A
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
017XX Deck General		20	70	

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 11.482

Specific time is not required

#### \* LICENSING NOTES

This is an additional endorsement that can be added to an existing officer endorsement. Assistance Towing endorsements are not independently issued.

# 4.5 First Class Pilots

# 4.5.1 Examination Structure Sheet Index - First Class Pilot Endorsements

# 4.5.1.1 Any Appropriate Tonnage

• Original Issue

First Class Pilot ESS 4-1

Renewal

First Class Pilot ESS 4-2

#### 4.5.2 Examination Structure Sheet – First Class Pilot Endorsements

EXAMINATION STRUCTURE SHEET NO. <b>4-1</b>	Endorsement - Tonnage Group- Route- Action-	FIRST CLASS PILOT NMT 1600 GROSS REGISTERED TONS ANY APPROPRIATE WATERS ORIGINAL ISSUE		EXAM CODE 31AA
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100/Q300 Rules of the Road:		50	90	
032XX Navigation General			20	70
031XX Deck General, Deck Safety and Environmental Protection			60	70
073XX Navigation Problems: Chart Plot			20	90
LK Local Knowledge		TBD	TBD	
CS Chart Ske	etch		TBD	TBD

#### \* SERVICE REQUIREMENT

46CFR 11.703

Is predicated upon the nature of the waters for which pilotage is desired

#### \* LICENSING NOTES

46CFR11.703 Route Familiarization Requirements 46CFR11.707 Examination Requirements

#### • Rules of the Road:

Module Q100 is administered for routes requiring International & Inland Rules of the Road Module Q300 is administered for routes requiring Inland Rules of the Road

Applicants requesting original officer endorsement as First Class Pilot on vessels NMT 1600 GRT MUST take all the modules listed above

Applicants requesting an extension of route or holding an MMC endorsement as Master or Mate authorized to serve on vessels of over 1600 GRT are ONLY required to take the Local Knowledge and Chart Sketch modules for the requested route.

# • Chart Plot for Applicants requesting Rivers Routes:

Module 074XX and 075XX are administered for River Routes Module 074XX is administered for Rivers other Than Western Rivers Module 075XX is administered for Western Rivers

#### • Local Knowledge and Chart Sketch Modules:

Will be maintained and administered by the Regional Exam Center in the local area. Questions, passing scores, reference materials and time limits are all established locally at the REC. Applicants should contact the REC for examination requirements for specific routes. REC's will keep completed Chart Sketches in Mariner files.

46CFR 11.711 Tonnage Requirements 46CFR 11.713 Recency Requirements

EXAMINATION STRUCTURE SHEET NO. 4-2	Endorsement - FIRST CLASS PILOT Tonnage Group- ANY APPROPRIATE T Route- ANY APPROPRIATE V Action- RENEWAL	EXAM CODE 31RR	
MODULES NUMBER OF QUESTIONS			MINIMUM SCORE
Q475/Q476 Rules	of the Road:	30	90
039XX Refresher Exercise		30	90

46CFR 10.227

Exams are required only if applicant does not have the required sea service for renewal or does not have closely related shore side experience or has not taken an approved refresher course.

#### \* LICENSING NOTES

<u>Rules of the Road:</u> Module Q475 is administered for routes requiring Inland and International Rules of the Road, Module Q476 is administered for routes requiring Inland Rules of the Road.

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

# 4.6 Uninspected Towing Vessels

# 4.6.1 Examination Structure Sheet Index – Uninspected Towing Vessels

# 4.6.1.1 Towing Vessels (TV) Any Appropriate Tonnage

•	Raise in Grade	
	Master TV Oceans	ESS 5-1
	Master TV Near Coastal	ESS 5-2
	Master TV Great Lakes and Inland	ESS 5-3
	Master TV Western Rivers	ESS 5-4
•	Raise in Grade	
	Mate Pilot TV Oceans	ESS 5-5
	Mate Pilot TV Near Coastal	ESS 5-6
	Mate Pilot TV Great Lakes and Inland	ESS 5-7
	Mate Pilot TV Western Rivers	ESS 5-8
•	Original Issue	
	Apprentice Mate Steersman TV Oceans	ESS 5-9
	Apprentice Mate Steersman TV Near Coastal	ESS 5-10
	Apprentice Mate Steersman TV Great Lakes and Inland	ESS 5-11
	Apprentice Mate Steersman TV Western Rivers	ESS 5-12
•	Increase in Scope	
	AMS/Mate Pilot/Master TV Oceans	ESS 5-13
	AMS/Mate Pilot/Master TV Near Coastal	ESS 5-14
	AMS/Mate Pilot/Master TV Great Lakes and Inland	ESS 5-15
	AMS/Mate Pilot/Master TV Western Rivers	ESS 5-16

#### Renewal

AMS/Mate Pilot/Master TV Oceans and Near Coastal	<b>ESS 5-17</b>
AMS/Mate Pilot/Master TV Great Lakes and Inland	<b>ESS 5-18</b>
AMS/Mate Pilot/Master TV Western Rivers	ESS 5-19

# 4.6.2 Examination Structure Sheets – Uninspected Towing Vessels

EXAMINATION STRUCTURE SHEET NO. 5-1	Endorsement - Tonnage Group- Route- Action-	MASTER TOWING ANY APPROPRIAT OCEANS RAISE IN GRADE (1	EXAM CODE <b>34MR</b>	
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
No testing required				

# \* SERVICE REQUIREMENT

46CFR 11.464

EXAMINATION STRUCTURE SHEET NO. 5-2	Endorsement - Tonnage Group- Route- Action-	MASTER TOWING ANY APPROPRIAT NEAR COASTAL RAISE IN GRADE (1	EXAM CODE 34MS	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
No testing required				

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 11.464

#### \* LICENSING NOTES

In order to gain endorsement on a superior route as Master of Towing Vessels, applicants must pass the exam for the desired route in order to have their MMC endorsed as Mate Pilot on that route. Upon completing ninety days of service and a Towing Officer Assessment Record for the route, the endorsement will be raised in grade to Master of Towing Vessels for that route.

EXAMINATION STRUCTURE SHEET NO. 5-3	Endorsement - Tonnage Group- Route- Action-	MASTER TOWING ANY APPROPRIAT GREAT LAKES AN RAISE IN GRADE (	E TONNAGE	EXAM CODE 35MR
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
No testing required				

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 11.464

#### \* LICENSING NOTES

In order to gain endorsement on a superior route as Master of Towing Vessels, applicants must pass the exam for the desired route in order to have their MMC endorsed as Mate Pilot on that route. Upon completing ninety days of service and a Towing Officer Assessment Record for the route, the endorsement will be raised in grade to Master of Towing Vessels for that route.

EXAMINATION STRUCTURE SHEET NO. 5-4	Endorsement - Tonnage Group- Route- Action-	ANY APPROPRIAT WESTERN RIVERS	MASTER TOWING VESSEL ANY APPROPRIATE TONNAGE WESTERN RIVERS RAISE IN GRADE (from Mate Pilot TV WR)		
MODULES NUM			NUMBER OF QUESTIONS	MINIMUM SCORE	
No testing required					

46CFR 11.464

#### \* LICENSING NOTES

In order to gain endorsement on a superior route as Master of Towing Vessels, applicants must pass the exam for the desired route in order to have their MMC endorsed as Mate Pilot on that route. Upon completing ninety days of service and a Towing Officer Assessment Record for the route, the endorsement will be raised in grade to Master of Towing Vessels for that route.

EXAMINATION STRUCTURE SHEET NO. 5-5	Endorsement - Tonnage Group- Route- Action-	MATE PILOT TOWING VESSEL ANY APPROPRIATE TONNAGE OCEANS RAISE IN GRADE (from Apprentice Mate O)		EXAM CODE 34MP
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
No testing required				

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 11.465

#### \* LICENSING NOTES

An applicant who holds an endorsement as Master of Towing Vessels for Local Limited Areas must complete a full TOAR for the route requested and successfully completes the following exam modules:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International	50	90
072X1 Navigation General	20	70
341XX Deck General, Deck Safety and Environmental Protection	60	70
073XX Navigation Problems: Chart Plot	20	90
078XX Navigation Problems: Oceans	5	80

EXAMINATION STRUCTURE SHEET NO. <b>5-6</b>	Endorsement - Tonnage Group- Route- Action-	MATE PILOT TOW ANY APPROPRIAT NEAR COASTAL RAISE IN GRADE (	EXAM CODE <b>34MA</b>	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
No testing required				

46CFR 11.465

#### \* LICENSING NOTES

An applicant who holds an endorsement as Master of Towing Vessels for Local Limited Areas must complete a full TOAR for the route requested and successfully completes the following exam modules:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International	50	90
072X1 Navigation General	20	70
341XX Deck General, Deck Safety and Environmental Protection	60	70
073XX Navigation Problems: Chart Plot	20	90

EXAMINATION STRUCTURE SHEET NO. 5-7	Endorsement - Tonnage Group- Route- Action-	MATE PILOT TOWING VESSEL ANY APPROPRIATE TONNAGE GREAT LAKES AND INLAND RAISE IN GRADE (from Apprentice Mate GL & I)		EXAM CODE 35MP
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
No testing required				

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 11.465

#### \* LICENSING NOTES

An applicant who holds an endorsement as Master of Towing Vessels for Local Limited Areas must complete a full TOAR for the route requested and successfully completes the following exam modules:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland	50	90
072X1 Navigation General	20	70
351XX Deck General, Deck Safety and Environmental Protection	60	70
073XX Navigation Problems: Chart Plot	20	90

EXAMINATION STRUCTURE SHEET NO. 5-8	Endorsement - Tonnage Group- Route- Action-	MATE PILOT TOWING VESSEL ANY APPROPRIATE TONNAGE WESTERN RIVERS RAISE IN GRADE (from Apprentice Mate WR)		EXAM CODE 36MP
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
No testing required				

46CFR 11.465

# \* LICENSING NOTES

An applicant who holds an endorsement as Master of Towing Vessels for Local Limited Areas must complete a full TOAR for the route requested and successfully complete the following exam modules:

MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland	50	90
072X4 Navigation General	15	70
361XX Deck General, Deck Safety and Environmental Protection	60	70
075XX Navigation Problems: Chart Plot	10	90

EXAMINATION STRUCTURE SHEET NO. <b>5-9</b>	Endorsement - APPRENTICE MATE STEERSMAN Tonnage Group- Route- OCEANS Action- ORIGINAL ISSUE		EXAM CODE 34AA	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International		50	90	
072X1 Navigation General		20	70	
341XX Deck General, Deck Safety and Environmental Protection		60	70	
073XX Navigation Problems: Chart Plot		20	90	
078XX Navigation Problems: Oceans		5	80	

# \* <u>SERVICE REQUIREMENT</u>

46CFR 11.466

EXAMINATION STRUCTURE SHEET NO. 5-10	Endorsement - APPRENTICE MATE STEERSMAN Tonnage Group- Route- NEAR COASTAL Action- ORIGINAL ISSUE		EXAM CODE 34AA
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q100 Rules of the Road: Inland and International		50	90
072X1 Navigation General		20	70
341XX Deck General, Deck Safety and Environmental Protection		60	70
073XX Navigation Problems: Chart Plot		20	90

46CFR 11.466

EXAMINATION STRUCTURE SHEET NO. <b>5-11</b>	Endorsement - Tonnage Group- Route- Action-			EXAM CODE 35AA
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
Q300 Rules of the Road: Inland		50	90	
072X1 Navigation General		20	70	
351XX Deck General, Deck Safety and Environmental Protection		60	70	
073XX Navigation Problems: Chart Plot		20	90	

# \* SERVICE REQUIREMENT

46CFR 11.466

# \* LICENSING NOTES

EXAMINATION STRUCTURE SHEET NO. 5-12	Endorsement - Tonnage Group- Route- Action-	APPRENTICE MATE STEERSMAN ANY APPROPRIATE TONNAGE WESTERN RIVERS ORIGINAL ISSUE		EXAM CODE 36AA
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
Q300 Rules of the Road: Inland		50	90	
072X4 Navigation General		15	70	
361XX Deck General, Deck Safety and Environmental Protection		60	70	
075XX Navigation Problems: Chart Plot		10	90	

## \* <u>SERVICE REQUIREMENT</u>

46CFR 11.466

EXAMINATION STRUCTURE SHEET NO. 5-13		MASTER/MATE PILOT/AMS TOWING VESSELS ANY APPROPRIATE TONNAGE OCEANS INCREASE IN SCOPE (from NC)		EXAM CODE 34IO
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
078XX Navigation Problems: Oceans		5	80	

## \* SERVICE REQUIREMENT for Master & Mate Pilot

46CFR 11.465

- 90 Days of service on the route desired
- Successful completion of any sections of the (TOAR) Towing Officer Assessment Record not previously completed.

## \* SERVICE REQUIREMENT for AMS

46CFR 11.466

After passing the above prescribed modules a restricted endorsement as Limited Apprentice Mate Steersman will be placed on your MMC. The restriction can be removed after obtaining Three Months of service on the route.

EXAMINATION STRUCTURE SHEET NO. <b>5-14</b>	Endorsement - Tonnage Group- Route- Action-  MASTER/MATE PI ANY APPROPRIAT NEAR COASTAL INCREASE IN SCO	EXAM CODE 34IN	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
341XX Deck Gene Protection	eral, Deck Safety and Environmental	60	70
Q100 Rules of the	Road: Inland and International	50	90

## \* SERVICE REQUIREMENT for Master & Mate Pilot

46CFR 11.465

- 90 Days of service on the route desired
- Successful completion of any sections of the (TOAR) Towing Officer Assessment Record not previously completed.

#### \* SERVICE REQUIREMENT for AMS

46CFR 11.466

After passing the above prescribed modules a restricted endorsement as Limited Apprentice Mate Steersman will be placed on your MMC. The restriction can be removed after obtaining Three Months of service on the route.

EXAMINATION STRUCTURE SHEET NO. 5-15	Endorsement - Tonnage Group- Route- Action-  MASTER/MATE PIL ANY APPROPRIATE GREAT LAKES AND INCREASE IN SCOP	EXAM CODE 35MR	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
072X1 Navigation General		20	70
073XX Navigation Problems: Chart Plot		20	90

#### \* SERVICE REQUIREMENT for Master & Mate Pilot

46CFR 11.465

- 90 Days of service on the route desired
- Successful completion of any sections of the (TOAR) Towing Officer Assessment Record not previously completed.

#### \* SERVICE REQUIREMENT for AMS

46CFR 11.466

After passing the above prescribed modules a restricted endorsement as Limited Apprentice Mate Steersman will be placed on your MMC. The restriction can be removed after obtaining Three Months of service on the route.

#### \* LICENSING NOTES

Applicants requesting Great Lakes and Inland or Inland officer endorsements are required to complete a Rules of the Road Q300 module covering Inland Rules of the Road. A geographic COLREGS limitation will be endorsed on the applicants MMC upon successful completion of this module. If the applicant wishes to remove the geographic COLREGS limitation they are required to complete a Rules of the Road module, Q100, covering Inland and International Rules of the Road in lieu of the Q300 module.

EXAMINATION STRUCTURE SHEET NO. <b>5-16</b>	Endorsement - MASTER/MATE PILO Tonnage Group-ANY APPROPRIATE TO Route- WESTERN RIVERS Action- INCREASE IN SCOPE	EXAM CODE <b>36MR</b>	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
072X4 Navigation General		15	70
075XX Navigation Problems: Chart Plot		10	90

EXAMINATION STRUCTURE SHEET NO. <b>5-17</b>	Endorsement - MASTER/MATE PILOT Tonnage Group- ANY APPROPRIATE T Route- OCEANS AND NEAR O Action- RENEWAL	EXAM CODE 34RE	
MODULES NUMBER OF QUE			MINIMUM SCORE
Q475 Rules of the	Road: Inland and International Renewal	50	90
349XX Refresher Exercise		20	90

#### \* <u>SERVICE REQUIREMENT</u>

46CFR 10.227

## \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. <b>5-18</b>	Endorsement - MASTER/MATE PILOT Tonnage Group Route- GREAT LAKES AND II Action- RENEWAL	EXAM CODE 35RE	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q476 Rules of the	Road: Inland Renewal Open Book Exercise	50	90
359XX Refresher Exercise		20	90

## \* <u>SERVICE REQUIREMENT</u>

46CFR 10.227

## \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

Applicants with a COLREGS limitation on their endorsement take module Q476 Rules of the Road: Inland Renewal Open Book Exercise. If they do not have a COLREGS limitation on their endorsement they take module Q475 Rules of the Road: Inland and International Renewal Open Book Exercise.

EXAMINATION STRUCTURE SHEET NO. 5-19	Endorsement - MASTER/MATE PILO Tonnage Group- ANY APPROPRIATE Route- WESTERN RIVERS Action- RENEWAL	EXAM CODE 36RE	
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
Q476 Rules of the	Road: Inland Renewal Open Book Exercise	50	90
369XX Refresher Exercise		20	90

46CFR 10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

# 4.7 Mobile Offshore Drilling Units

#### 4.7.1 Information

• IAW 46CFR10.107 the term **Mobile Offshore Drilling Unit (MODU)** means a vessel capable of engaging in drilling operations for the exploration for or exploitation of sub-sea resources. MODU designs include the following:

Bottom bearing units, which include:

- Self-elevating (or jack-up) units with moveable, bottom bearing legs capable of raising the hull above the surface of the sea; and
- Submersible units of ship-shape, barge-type, or novel hull design, other than a self-elevating unit, intended for operating while bottom bearing.
- Surface units with a ship-shape or barge-type displacement hull of single or multiple hull construction intended for operating in a floating condition, including semi-submersibles and drill ships.

IAW 46CFR 11.468 Officer endorsements for service on mobile offshore drilling units (MODUs) authorize service on units of any gross tons upon ocean waters while on location or while underway, as restricted on the endorsement, except when moving independently under their own power.

# 4.7.2 Examination Structure Sheet Index – Mobile Offshore Drilling Unit Endorsement

# 4.7.2.1 Offshore Installation Manager (OIM)

	3 ( )	
	• Original	
	OIM: Unrestricted	ESS 6-1
	OIM: Surface Units on Location	ESS 6-2
	OIM: Surface Units Underway	ESS 6-3
	OIM: Bottom Bearing Units on Location	ESS 6-4
	OIM: Bottom Bearing Units Underway	ESS 6-5
	• Renewal	
	Offshore Installation Manager	ESS 6-6
4.7.2.2	<ul><li>Barge Supervisor (BS):</li><li>Original Barge Supervisor</li></ul>	ESS 6-7
	• Renewal	
	Barge Supervisor	ESS 6-8
4.7.2.3	Ballast Control Operator (BCO):	
	• Original	
	Ballast Control Operator	ESS 6-9
	• Renewal	
	<b>Ballast Control Operator</b>	ESS 6-10

# 4.7.3 Examination Structure Sheets- Mobile Offshore Drilling Unit Endorsement

EXAMINATION STRUCTURE SHEET NO. 6-1	Endorsement - Tonnage Group- Route- Action-	nage Group- te-  MOBILE OFFSHORE DRILLING UNIT UNRESTRICTED		EXAM CODE <b>92FA</b>
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
921XX MODU Operations		50	70	
922XX Deck General, Deck Safety and Environmental Protection		60	70	

## \* LICENSING NOTES

46CFR 11.903(b)

Applicants for this endorsement who hold Master AGT Oceans are only required to complete the required service and training, NO TESTING IS REQUIRED.

Any applicant holding a restricted endorsement can **Increase the Scope** of their endorsement to **Unrestricted OIM** by successfully completing Module 921XX MODU Operations

EXAMINATION STRUCTURE SHEET NO. 6-2	Endorsement - Tonnage Group- Route- Action-	OFFSHORE INSTAI MOBILE OFFSHOR SURFACE UNITS O ORIGINAL ISSUE	EXAM CODE <b>92FA</b>
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
931XX Surface Units on Location Operations		30	70
922XX Deck General, Deck Safety and Environmental Protection		60	70

EXAMINATION STRUCTURE SHEET NO. 6-3	Endorsement - Tonnage Group- Route- Action-	OFFSHORE INSTAI MOBILE OFFSHOR SURFACE UNITS U ORIGINAL ISSUE	EXAM CODE <b>92FA</b>	
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
941XX Surface Units Underway Operations		30	70	
922XX Deck General, Deck Safety and Environmental Protection		60	70	

EXAMINATION STRUCTURE SHEET NO. 6-4	Endorsement - Tonnage Group- Route- Action-	OFFSHORE INSTALLATION MANAGER MOBILE OFFSHORE DRILLING UNIT BOTTOM BEARING UNITS ON LOCATION ORIGINAL ISSUE		EXAM CODE 92FA
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
951XX Bottom Bearing Units on Location Operations			30	70
922XX Deck General, Deck Safety and Environmental Protection			60	70

EXAMINATION STRUCTURE SHEET NO. 6-5	Endorsement - Tonnage Group- Route- Action-	OFFSHORE INSTALLATION MANAGER MOBILE OFFSHORE DRILLING UNIT BOTTOM BEARING UNITS UNDERWAY ORIGINAL ISSUE		EXAM CODE <b>92FA</b>
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
961XX Bottom Bearing Units Underway Operations			30	70
922XX Deck General, Deck Safety and Environmental Protection			60	70

46CFR11.470

Various depending on the endorsements

EXAMINATION STRUCTURE SHEET NO. 6-6	Endorsement - OFFSHORE INSTALLATION MANAGER Tonnage Group- MOBILE OFFSHORE DRILLING UNIT Route- ALL Action- RENEWAL		EXAM CODE 92RE
	MODULES	NUMBER OF QUESTIONS	MINIMUM SCORE
929XX Refresher Exercise		30	90

## \* SERVICE REQUIREMENT

46CFR10.227

## \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. 6-7	Endorsement - Tonnage Group- Action-	BARGE SUPERVISOR MOBILE OFFSHORE DRILLING UNIT ORIGINAL ISSUE		EXAM CODE 91AA
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
911XX MODU Operations		50	70	
912XX Deck General, Deck Safety and Environmental Protection		60	70	

## \* <u>SERVICE REQUIREMENT</u>

46CFR11.472

EXAMINATION STRUCTURE SHEET NO. 6-8	Endorsement - Tonnage Group- Action-  BARGE SUPERVISOR  MOBILE OFFSHORE DRILLING UNIT  RENEWAL		EXAM CODE 91RE
MODULES NUMBER OF QUES		NUMBER OF QUESTIONS	MINIMUM SCORE
919XX Refresher Exercise		30	90

#### \* SERVICE REQUIREMENT

46CFR10.227

## \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

EXAMINATION STRUCTURE SHEET NO. 6-9	Endorsement - Tonnage Group- Action-	BALLAST CONTROL OPERATOR MOBILE OFFSHORE DRILLING UNIT ORIGINAL ISSUE		EXAM CODE 90AA
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
901XX MODU Operations		50	70	
902XX Deck General, Deck Safety and Environmental Protection		60	70	

## \* <u>SERVICE REQUIREMENT</u>

46CFR11.474

EXAMINATION STRUCTURE SHEET NO. 6-10	Endorsement - BALLAST CONTROL OPERATOR Tonnage Group- Action- MOBILE OFFSHORE DRILLING UNIT RENEWAL		EXAM CODE 90RE
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
909XX Refresher Exercise		30	90

46CFR10.227

## \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

## 4.8 Deck Rating Endorsements

## 4.8.1 Information

- **Lifeboatman** Regulations can be found in 46CFR 12.10
- **Able Seaman** regulations can be found in 46CFR 12.05

#### IAW 46CFR12.05-1(c) The following categories of able seaman are established:

- (1) Able Seaman—Any Waters, Unlimited.
- (2) Able Seaman—Limited.
- (3) Able Seaman—Special.
- (4) Able Seaman—Special (OSV).

#### IAW US Code Title 46/II Part E

- (1) 7311 Able Seaman-Sail
- (2) 7311a Able Seaman-Fishing Industry
- **Tankerman** Regulations can be found in 46CFR 13.0

# 4.8.2 Examination Structure Sheet Index – Deck Rating Endorsements

# 4.8.2.1 Lifeboatman

• Original	
Lifeboatman: Unlimited	ESS 7-1
• Renewal	
Lifeboatman: Unlimited	ESS 7-2
Original	
Lifeboatman: Limited	ESS 7-3
	20070
• Renewal	EGG # 4
Lifeboatman: Limited	ESS 7-4
1.8.2.2 Able Seaman	
• Original	
AB: Unlimited/Limited/Special/OSV Special/Fishing Industry	ESS 7-5
Renewal	
AB: Unlimited/Limited/Special/OSV Special/Fishing Industry	ESS 7-6
	200:0
• Original AB: Sail	ESS 7-7
	E88 7-7
• Renewal	
AB: Sail	ESS 7-8
Practical Assessment	
Marlinespike Seamanship	ESS 7-9
1.8.2.3 Tankerman	
i.o.z.5 Talikelillali	
<ul> <li>Renewal</li> </ul>	
Tankerman: PIC or Engineer- Dangerous Liquids	ESS 7-1
Tankerman: PIC or Engineer- Liquefied Gas	ESS 7-11
Tankerman: PIC Barge Dangerous Liquids	ESS 7-12
Tankerman: PIC Barge Liquefied Gas	ESS 7-1.
Tankerman: Assistant Dangerous Liquids	ESS 7-14
Tankerman: Assistant Liquefied Gas	ESS 7-1:

## 4.8.3 Examination Structure Sheet – Deck Rating Endorsements

EXAMINATION STRUCTURE SHEET NO. <b>7-1</b>	Endorsement - Tonnage Group- Route- Action-	LIFEBOATMAN UNLIMITED ANY WATERS ORIGINAL ISSUE		EXAM CODE <b>48AA</b>
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
481XX Deck Safety and Rules of the Road			70	70

## \* <u>SERVICE REQUIREMENT</u>

46CFR12.10-3

#### \* LICENSING NOTES

Successful completion of a Lifeboat practical assessment is required. The assessment is not given at the Regional Exams Centers and must be completed at a USCG approved facility/school or via NMC Policy Letter 08-01.

EXAMINATION STRUCTURE SHEET NO. <b>7-2</b>	Endorsement - Tonnage Group- Route- Action-	LIFEBOATMAN UNLIMITED ANY WATERS RENEWAL		EXAM CODE 48RE
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
489XX Refresher Exercise		20	90	

## \* SERVICE REQUIREMENT

46CFR10.227

#### \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

Engineers holding Lifeboatmen renewing their credential with closely related shoreside experience **must** take the above module in addition to any engineering modules required for renewal.

EXAMINATION STRUCTURE SHEET NO. 7-3	Endorsement - Tonnage Group- Route- Action-	LIFEBOATMAN LIMITED (Vessels not equipped with lifeboats) ANY WATERS ORIGINAL ISSUE		EXAM CODE 44BA
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
441XX Survival Craft			50	70

## \* LICENSING NOTES

Successful completion of a Personal Survival Craft practical assessment is required. The assessment is not given at the Regional Exams Centers and must be completed at a USCG approved facility/school or via NMC Policy Letter 08-01. The successful completion of a USCG Personal Survival techniques course is required.

EXAMINATION STRUCTURE SHEET NO. <b>7-4</b>	Endorsement - Tonnage Group- Route- Action-	LIFEBOATMAN LIMITED (Vessels not equipped with lifeboats) ANY WATERS RENEWAL		EXAM CODE 44RE
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
449XX Refresher Exercise		20	90	

46CFR10.227

## \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

Engineers holding Lifeboatmen Limited renewing their credential with closely related shoreside experience **must take** the above module in addition to any engineering modules required for renewal.

EXAMINATION STRUCTURE SHEET NO. 7-5	Endorsement - Tonnage Group- Route- Action-	ABLE SEAMAN UNLIMITED, LIMITED, SPECIAL SPECIAL OSV AND FISHING INDUSTRY ANY WATERS ORIGINAL ISSUE		EXAM CODE <b>45AA</b>
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
451XX Deck General and Navigation General		50	70	
452XX Deck Safety and Rules of the Road			50	70

#### \* SERVICE REQUIREMENT

46CFR 12.05-7 US Code Title 46/II Part E 7311a

# \* LICENSING NOTES

Successful completion of a Practical Marlinspike Seamanship Demonstration is required. The assessment is given at the Regional Exams Centers but may ALSO be completed at a USCG approved facility/school.

Applicants applying for any Able Seaman endorsement must successfully obtain a Lifeboatman endorsement

Applicants holding any Limited Able Seaman endorsements, (except AB Sail), may obtain Able Seaman Unlimited without further examination upon presenting the required sea service.

EXAMINATION STRUCTURE SHEET NO. <b>7-6</b>	Endorsement - Tonnage Group- Route- Action-	ABLE SEAMAN UNLIMITED, LIMITED, SPECIAL SPECIAL OSV AND FISHING INDUSTRY ANY WATERS RENEWAL		EXAM CODE 45RE
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
459XX Refresher Exercise			30	90

46CFR10.227

## \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

Separate Lifeboatman renewal modules are NOT required for to renew Able Seaman endorsements

EXAMINATION STRUCTURE SHEET NO. 7-7	Endorsement - ABLE S Tonnage Group- Route- ANY WA Action- ORIGIN		EXAM CODE 43AB
	MODULES	NUMBER OF QUESTION	S MINIMUM SCORE
431XX Deck Gene	ral and Navigation General	50	70
432XX Deck Safet	y and Rules of the Road	50	70

#### \* <u>SERVICE REQUIREMENT</u>

#### US Code Title 46/II Part E 7311

## \* LICENSING NOTES

Successful completion of a Practical Marlinspike Seamanship Demonstration is required. The assessment is given at the Regional Exams Centers but may ALSO be completed at a USCG approved facility/school.

Applicants applying for any Able Seaman endorsement must successfully obtain a Lifeboatman endorsement

EXAMINATION STRUCTURE SHEET NO. <b>7-8</b>	Endorsement - Tonnage Group- Route- Action-	ABLE SEAMAN SAIL ANY WATERS RENEWAL		EXAM CODE 43RE
MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE	
439XX Refresher Exercise			30	90

#### \* SERVICE REQUIREMENT

46CFR10.227

## \* LICENSING NOTES

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

Separate Lifeboatman renewal modules are NOT required for to renew Able Seaman endorsements

EXAMINATION STRUCTURE SHEET NO. <b>7-9</b>	Endorsement - Tonnage Group- Route- Action-	ABLE SEAMAN UNLIMITED, LIMITED, SPECIAL, SPECIAL OSV ANY WATERS MARLINSPIKE SEAMANSHIP ASSESSMENT	EXHIBIT
REQUIR	ED KNOT	NOTE	TIME LIMIT
One eye splice OR sl must be whipped	nort splice, strands	Required	15 Minutes
Bowline		Required	15 minutes for all 10
Square Knot		Required	15 minutes for all 10
Clove Hitch		Required	15 minutes for all 10
Sheet Bend		Required	15 minutes for all 10
Carrick Bend		May be one of six additional demonstrated	15 minutes for all 10
Rolling Hitch		May be one of six additional demonstrated	15 minutes for all 10
Stopper Hitch		May be one of six additional demonstrated	15 minutes for all 10
French Bowline		May be one of six additional demonstrated	15 minutes for all 10
Stage Hitch		May be one of six additional demonstrated	15 minutes for all 10
Running Bowline		May be one of six additional demonstrated	15 minutes for all 10
Bowline on a Bight		May be one of six additional demonstrated	15 minutes for all 10
Fisherman's Bend		May be one of six additional demonstrated	15 minutes for all 10
Timber hitch		May be one of six additional demonstrated	15 minutes for all 10
Catspaw		May be one of six additional demonstrated	15 minutes for all 10
Figure Eight		May be one of six additional demonstrated	15 minutes for all 10
Barrel Hitch		May be one of six additional demonstrated	15 minutes for all 10
Round Turn and Two Half Hitches		May be one of six additional demonstrated	15 minutes for all 10
Double Becket Bend		May be one of six additional demonstrated	15 minutes for all 10

\* <u>REQUIREMENT</u> 46CFR 12.059(c)

All applicants for an Able Seaman Endorsement must demonstrate knowledge and ability to make principal knots, bends, splices and hitches.

A total of ten knots must be successfully demonstrated within a 15 minute time limit. Four are required, six additional knots must be chosen from the list.

Applicants must successfully demonstrate seven of the ten knots and successfully demonstrate the whipping to successfully demonstrate proficiency.

#### \* ASSESSMENT NOTES

- 1. Spliced line may not be reused.
- 2. The demonstration must be completed at a USCG approved facility/school.
- 3. A standard format Letter of Proficiency may be accepted in lieu of the marlinspike seamanship demonstration:

# ABLE SEAMAN LETTER OF PROFICIENCY IN MARLINESPIKE SEAMANSHIP ASSESSMENT

## Person Observing the Demonstration

- Your assistance in administering the practical portion of the Able Seaman examination required under 46 CFR 12.05-9(c) is appreciated. Certification of the mariner's ability to demonstrate proficiency in performing the marlinspike skills listed in ESS 5-9 will enable the issuance of their Able Seaman's certification.
- 2. The demonstration of ability shall be witnessed by a designated examiner as part of an approved or accepted training course, a vessel Master or other officer licensed for service on vessels of over 200 gross registered tons, an appropriately trained Coast Guard Officer, or a responsible person authorized in writing by the Officer in Charge Marine Inspection.

To: Officer in Charge Marine Inspection (Regional Examination Center)

Subi: **Certification of Performance of Practical Ability** 

This is to certify that I observed a successful demonstration of the applicant's proficiency, as

EXAMINATION STRUCTURE SHEET NO. <b>7-10</b>	Endorsement - Tonnage Group- Action-	Tonnage Group- DANGEROUS LIQUIDS		
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
970XX Tankerman	Dangerous Liquids		25	90
EXAMINATION STRUCTURE SHEET NO. 7-11  Endorsement - TANKERMAN PIC OR TANKERMAN ENGINEER LIQUEFIED GAS RENEWAL			EXAM CODE 91TK	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
971XX Tankerman	Liquefied Gas		25	90
				1
EXAMINATION STRUCTURE SHEET NO. <b>7-12</b>	Endorsement - Tonnage Group- Action-	TANKERMAN PIC BARGE DANGEROUS LIQUIDS RENEWAL		EXAM CODE 91TK
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
972XX Tankerman	Barge Dangerous I	iquids	25	90
EXAMINATION STRUCTURE SHEET NO. 7-13  Endorsement - TANKERMAN PIC I LIQUEFIED GAS RENEWAL		BARGE	EXAM CODE 91TK	
	MODULES		NUMBER OF QUESTIONS	MINIMUM SCORE
973XX Tankerman Barge Liquefied Gas			25	90
	1			
EXAMINATION STRUCTURE SHEET NO. 7-14  Endorsement - TONNage Group- Action- TANKERMAN ASSI DANGEROUS LIQU RENEWAL				EXAM CODE 91TK
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
974XX Tankerman Assistant Dangerous Liquids			25	90

EXAMINATION STRUCTURE SHEET NO. <b>7-15</b>	Endorsement - Tonnage Group- Action-	TANKERMAN ASSISTANT LIQUEFIED GAS RENEWAL		EXAM CODE 91TK
MODULES			NUMBER OF QUESTIONS	MINIMUM SCORE
975XX Tankerman Assistant Liquefied Gas		25	90	

46CFR10.227/46CFR

13.120

## \* <u>LICENSING NOTES</u>

Renewal Modules are take home exams issued to the mariner by the Regional Exam Centers. It is recommended that completed exams must be returned to the Regional Exam Center for grading within thirty days in order to assure the exam cycle, including retakes, is completed within ninety days.

## 5. 46 CFR QUICK INDEX

The following contains parts 10 - 13.

#### 5.1 46 CFR PART 10—MERCHANT MARINER CREDENTIAL

## **Subpart A—General**

- § 10.107 Definitions in subchapter B.
- § 10.109 Classification of endorsements.

## **Subpart B—General Requirements for All Merchant Mariner Credentials**

- § 10.223 Modification or removal of limitations or scope.
- § 10.225 Requirements for original merchant mariner credentials.
- § 10.227 Requirements for renewal.
- § 10.231 Requirements for raises of grade or new endorsements.
- § 10.239 Quick reference table for MMC requirements.

#### 5.2 46 CFR PART 11—REQUIREMENTS FOR OFFICER ENDORSEMENTS

## **Subpart B—General Requirements for Officer Endorsements**

- § 11.201 Eligibility for officer endorsements and STCW endorsements, general.
- § 11.202 STCW endorsements.
- § 11.205 Requirements for original officer endorsements and STCW endorsements.
- § 11.211 Creditable service and equivalents for officer endorsements.
- § 11.213 Sea service as a member of the Armed Forces of the United States and on vessels owned by the United States as qualifying experience.
- § 11.217 Examination procedures and denial of officer endorsements.

## **Subpart D—Professional Requirements for Deck Officers**

See 11.401 - 11.497

## **Subpart E—Professional Requirements for Engineer Officer**

- § 11.501 Grade and type of engineer endorsements issued.
- § 11.502 Additional requirements for engineer endorsements.
- § 11.503 Horsepower limitations.
- § 11.504 Application of deck service for limited engineer endorsements.
- § 11.505 Engineer officer structure.
- § 11.510 Service requirements for chief engineer of steam and/or motor vessels.
- § 11.512 Service requirements for first assistant engineer of steam and/or motor

vessels.

- § 11.514 Service requirements for second assistant engineer of steam and/or motor vessels.
- § 11.516 Service requirements for third assistant engineer of steam and/or motor vessels.
- § 11.518 Service requirements for chief engineer (limited oceans) of steam and/or motor vessels.
- § 11.520 Service requirements for chief engineer (limited near coastal) of steam and/or motor vessels.
- § 11.522 Service requirements for assistant engineer (limited oceans
- § 11.524 Service requirements for designated duty engineer of steam and/or motor vessels.
- § 11.530 Endorsements for engineers of uninspected fishing industry vessels.

- § 11.540 Endorsements for engineers of mobile offshore drilling units.
- § 11.542 Endorsement as chief engineer (MODU).
- § 11.544 Endorsement as assistant engineer (MODU).
- § 11.551 Endorsements for service on offshore supply vessels.
- § 11.553 Chief Engineer (OSV).
- § 11.555 Engineer (OSV).

## **Subpart G—Professional Requirements for Pilots**

See 11.701-11.713

# <u>Subpart I—Subjects of Examinations and Practical Demonstrations of Competence</u>

- § 11.901 General provisions.
- § 11.903 Licenses requiring examinations.
- § 11.910 Subjects for deck officer endorsements.
- § 11.920 Subjects for MODU endorsements.
- § 11.950 Subjects for engineer endorsements.

## 5.3 46 CFR PART 12—REQUIREMENTS FOR RATING ENDORSEMENTS:

#### **Subpart 12.02—General Requirements for Certification**

- § 12.02-11 General provisions respecting rating endorsements.
- § 12.02-17 Examination procedures and denial of rating endorsements.

## **Subpart 12.03—Approved and Accepted Training**

§ 12.03-1 Coast Guard-accepted training other than approved courses.

## **Subpart 12.05—Able Seamen**

- § 12.05-7 Service or training requirements.
- § 12.05-9 Examination and demonstration of ability.

## **Subpart 12.10—Lifeboatman**

- § 12.10-1 Credentials required.
- § 12.10-3 General requirements.
- § 12.10-5 Examination and demonstration of ability.
- § 12.10-7 General provisions respecting an MMC endorsed as lifeboatman.
- § 12.10-9 Endorsement for proficiency in fast rescue boats.

## Subpart 12.15—Qualified Member of the Engine Department

- § 12.15-7 Service or training requirements.
- § 12.15-9 Examination requirements.
- § 12.15-11 General provisions respecting an endorsement as qualified member of the engine department.
- § 12.15-13 Deck engine mechanic.
- § 12.15-15 Engineman.

#### 5.4 46 CFR PART 13—CERTIFICATION OF TANKERMEN

## **Subpart A—General**

- § 13.101 Purpose.
- § 13.103 [Reserved]
- § 13.105 Paperwork approval.
- § 13.106 Requirement to hold an MMC.
- § 13.107 Tankerman endorsement: General.

- § 13.109 Tankerman endorsement: Authorized cargoes.
- § 13.111 Restricted tankerman endorsement.
- §§ 13.113-13.117 [Reserved]
- § 13.119 Expiration of endorsement.
- § 13.120 Renewal of tankerman endorsement.
- § 13.121 Courses for tankerman endorsements.
- § 13.123 Recency of service or experience for original tankerman endorsement.
- § 13.125 Physical and medical requirements.
- § 13.127 Service: General.
- § 13.129 Quick-reference table for tankerman endorsements.

## Subpart B—Requirements for "Tankerman-PIC" Endorsement

- § 13.201 Original application for "Tankerman-PIC" endorsement.
- § 13.203 Eligibility: Experience.
- § 13.205 Proof of service for "Tankerman-PIC" endorsement.
- § 13.207 Eligibility: Firefighting course.
- § 13.209 Eligibility: Cargo course.

## Subpart C—Requirements for "Tankerman-PIC (Barge)" Endorsement

- § 13.301 Original application for "Tankerman-PIC (Barge)" endorsement.
- § 13.303 Eligibility: Experience.
- § 13.305 Proof of service for "Tankerman-PIC (Barge)" endorsement.
- § 13.307 Eligibility: Firefighting course.
- § 13.309 Eligibility: Cargo course.

## Subpart D—Requirements for "Tankerman-Assistant" Endorsement

- § 13.401 Original application for "Tankerman-Assistant" endorsement.
- § 13.403 Eligibility: Experience.
- § 13.405 Proof of service for "Tankerman-Assistant" endorsement.
- § 13.407 Eligibility: Firefighting course.
- § 13.409 Eligibility: Cargo course.

## Subpart E—Requirements for "Tankerman-Engineer" Endorsement

- § 13.501 Original application for "Tankerman-Engineer" endorsement.
- § 13.503 Eligibility: Experience.
- § 13.505 Proof of service for "Tankerman-Engineer" endorsement.
- § 13.507 Eligibility: Firefighting course.
- § 13.509 Eligibility: Cargo course.